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EXPANDED SITE INSPECTION REPORT

**FORD ROAD LANDFILL
ELYRIA, OHIO**

U.S. EPA ID NO.: OHD 980 510 002

FINAL REPORT

Prepared for

**U.S. ENVIRONMENTAL PROTECTION AGENCY
Site Assessment Section
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1.0 INTRODUCTION

PRC Environmental Management, Inc. (PRC), was tasked by the U.S. Environmental Protection Agency (U.S. EPA) to conduct expanded site inspections (ESI) in Region 5 under Contract No. 68-W8-0084, Work Assignment No. 36-5JZZ.

The primary objective of an ESI is to determine whether a site has the potential to be placed on the National Priorities List (NPL). The NPL identifies sites where releases or threatened releases of hazardous substances pose a serious enough risk to public health or the environment to warrant further investigation and possible remediation under the Comprehensive Environmental Response, Compensation, and Liability Act of 1980 (CERCLA), and the Superfund Amendments and Reauthorization Act of 1986 (SARA).

Information gathered during the ESI is used to generate a preliminary Hazard Ranking System (HRS) score. The HRS is the primary criterion U.S. EPA uses to determine whether a site should be placed on the NPL (Federal Register 1990). ESIs are generally conducted at sites where additional environmental sampling or monitoring well installation is necessary to fulfill HRS documentation requirements, and to address site issues not adequately resolved in previous investigations.

Specifically, the objectives of the ESI are as follows:

- To investigate and document critical hypotheses or assumptions not completely tested during previous investigations
- To collect samples to attribute hazardous substances to site operations
- To collect samples to establish representative background levels
- To collect any other missing HRS data
- To document current site conditions
- To assess the need for emergency response actions

After the ESI report is finalized, U.S. EPA, in consultation with state authorities, will determine whether the site should undergo further investigation, or should be designated "site evaluation

accomplished" (SEA). The SEA designation means that no additional investigations will be conducted based on information available at the time of the SEA designation. However, if new site information is brought to U.S. EPA's attention, the site may be reevaluated. For sites warranting further investigation under CERCLA and SARA authority, an HRS scoring package will be prepared using data collected during the ESI. Preparation of an HRS package may result in NPL listing of the site.

This report documents the results of an ESI conducted at the Ford Road Landfill site in Elyria, Lorain County, Ohio. PRC gathered and reviewed information from the Ohio Environmental Protection Agency (OEPA) and from U.S. EPA Region 5 CERCLA files. PRC performed a reconnaissance inspection of the Ford Road Landfill site on March 8, 1993. The inspection included an interview with the site representative and a walk-through inspection of the site. Based on information obtained during the site reconnaissance, PRC submitted an ESI site-specific implementation plan (SSIP) to U.S. EPA for approval. U.S. EPA approved the SSIP on May 14, 1993.

PRC collected three groundwater, two surface water, six sediment, and two soil samples on May 18, 1993.

2.0 SITE BACKGROUND

This section describes the Ford Road Landfill site; its current and past operations, including waste disposal practices, release history; and previous investigations.

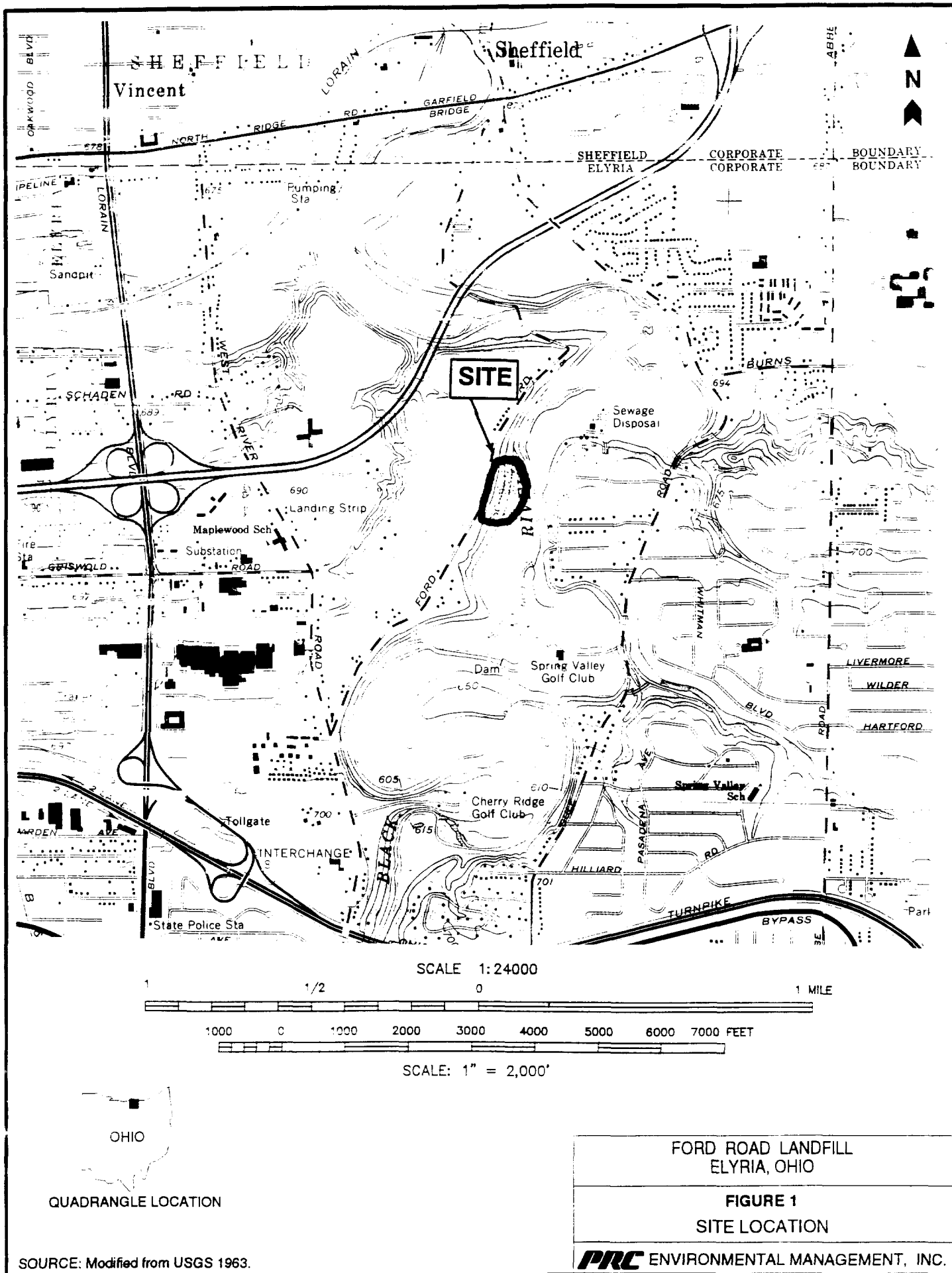
2.1 SITE DESCRIPTION

The Ford Road Landfill site is an inactive 15-acre landfill located on Ford Road in Elyria, Lorain County, Ohio (Ecology and Environment, Inc. [E&E] 1980). The site is located on the northern edge of Elyria about 1.5 miles northeast of Interchange 8 of the Ohio Turnpike. The sites geographic coordinates are 41°22'30.0" N and 82°00'0.0" W (E&E 1983a) (see Figure 1). The site is bordered by Ford Road and the Black River Preserve on the west, the Black River on the east, an intermittent stream and a sewer main that is covered with riprap on the north, and a ravine and rural land to the south (see Figure 2). Scattered residences are located within 1 mile of the site (see Figure 1).

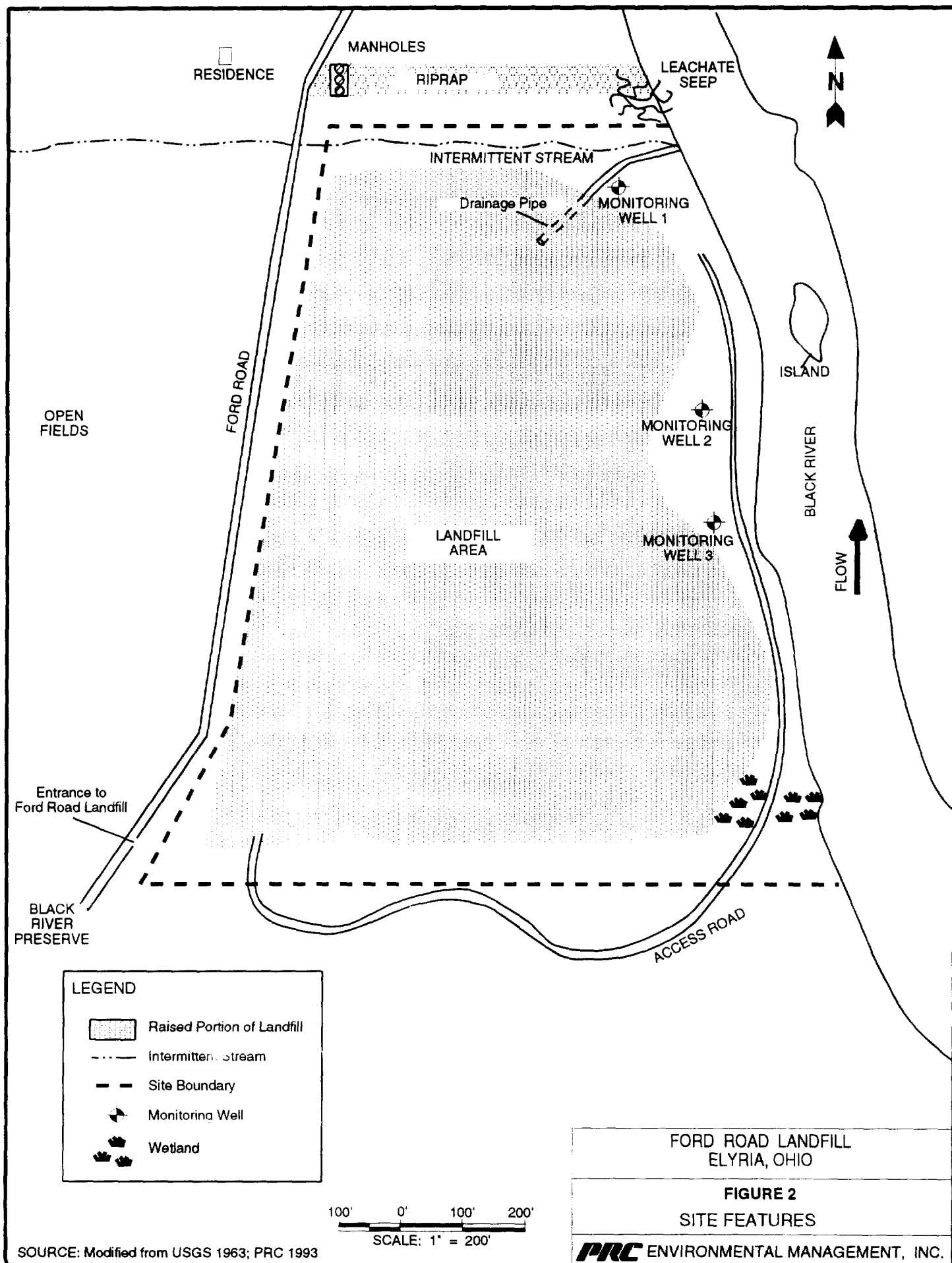
Population density to the south and east is typically suburban. The area to the north and west (within 1 mile) is fairly open and undeveloped. The nearest residence is about 200 feet northwest of the site.

There are no permanent structures on the Ford Road Landfill site (U.S. Geological Survey [USGS] 1963). However, three monitoring wells, installed in 1983 by E&E, and a drainage pipe are located along the west bank of the Black River on landfill property (E&E 1983c; PRC 1993) (see Figure 2). The landfill was originally a ravine located along the east side of Ford Road but has since been filled by waste disposal. The surface of the landfill is now at the same elevation as Ford Road, approximately 50 to 75 feet above the Black River (E&E 1983b; OEPA 1987; PRC 1993). The landfill slopes away steeply to the north, south, and east (USGS 1963; E&E 1980; E&E 1983b).

Surface water runoff from the landfill drains in three directions. The north side of the site drains to an intermittent stream that drains to the Black River. Surface water runoff on the east side of the site drains east to the Black River as overland flow. The south side of the site drains south to a ravine created by landfilling operations. This ravine is now occupied by an access road (see Figure 2). Runoff draining to the access road enters a wetland at the base of the landfill, which then drains to the Black River.



SOURCE: Modified from USGS 1963.



The Black River is used for recreational fishing in the Elyria area. No information was available on the amounts or types of fish caught (Ohio Department of Natural Resources [ODNR] 1993a). There are many accounts of leachate from the Ford Road Landfill actively flowing into the Black River (E&E 1980; E&E 1983a; E&E 1983b; Elyria City Department of Health 1972; No author 1980; OEPA 1972; PRC 1993). During the site reconnaissance, a leachate seep was observed entering the Black River from the northeast corner of the landfill.

The Ford Road Landfill site is underlain by clayey silts, silty clays, sandy silts, silt, and clayey sands. The bedrock in the area consists of shales at depths ranging from 9 to 50 feet below ground surface (Herron Consultants, Inc. 1981; E&E 1981; OEPA 1982). The landfill has been inactive since 1974 and is being closed by Browning-Ferris Industries (BFI). The surface of the landfill is covered with 5 to 8 feet of cover material, including clean fill and clay (PRC 1993). Groundwater flow is expected to be east-northeast toward the Black River (E&E 1981).

The average net precipitation is 4 inches (E&E 1983b). The 2-year, 24-hour rainfall for the region is 2.0 inches (U.S. Department of Commerce no date). The site is located in the 100-year flood plain of the Black River (E&E 1980; E&E 1983b).

2.2 SITE OPERATIONS AND HISTORY

The Ford Road Landfill site is owned by the Lorain County Metropolitan Parks Department and is operated by BFI (E&E 1980). Currently, BFI is closing the landfill. Clean fill material from a local construction site is being used for cover material and for grading and leveling the site.

The 15-acre landfill was used for the disposal of industrial wastes from an undetermined date (estimated to be 1950) until 1974. The site was owned and operated by Brotherton Disposal, Inc. (Brotherton), from 1963 until BFI bought (date unknown) all the Brotherton landfills, including the Ford Road Landfill (BFI 1993; Brotherton 1971). Ownership of the site before Brotherton has not been determined.

Wastes from local industries were disposed of in the landfill. Trucks were backed up to a steep bank, and the contents of the trucks were dumped over the bank. Wastes were burned along the river bank

24 hours a day, seven days per week (Brotherton 1971; E&E 1980). Four local industries are known to have disposed of hazardous wastes in the Ford Road Landfill. BFI disposed of organics, inorganics, heavy metals, sanitary sewage sludge, paint sludges, latex sludges, and small quantities of unknown hazardous wastes. Those wastes were generated from construction, paper and printing, iron and steel foundry, general chemical, plating and polishing, sanitary and refuse, and laboratory and hospital operations (BFI 1981). The period during which BFI disposed of wastes in the landfill is not documented.

From 1950 until 1974, the Ford Road Landfill also accepted more than 700 tons of hazardous materials from Harshaw Chemicals (a subsidiary of Gulf Oil Company). Materials accepted included heavy metals, other inorganic substances, and miscellaneous catalysts and insecticides (OEPA 1980; Gulf Oil Company 1981).

It has also been documented that the Elyria General Motors facility disposed of unidentified sludges at the Ford Road Landfill between 1963 and 1970. The company dumped an estimated 32,000 gallons of sludge per day, 5 days per week. The sludges contained 5 percent solids and were disposed of in lagoons that contained ash. The type and origin of the ash has not been identified, but it is believed to have resulted from the burning of wastes. The sludge was filtered through the ash, leaving solids trapped in the lagoon. The sludge operation accounted for 50 percent of the Ford Road Landfill operations from 1963 until 1970 (Brotherton 1971).

From 1965 through 1974, BF Goodrich Company, Chemical Group disposed of an estimated 3.289 million pounds of organics, solvents, resins, oils and sludges, elastomers, acrylates, and latex emulsions at the landfill (OEPA 1980; BF Goodrich 1981).

There have been reports of possible illegal or "midnight dumping" during the active life of the landfill (E&E 1980).

2.3 PREVIOUS INVESTIGATIONS

Previous investigations conducted at the Ford Road Landfill include investigations by U.S. EPA, OEPA, E&E, and the Elyria City Department of Health. U.S. EPA prepared a potential hazardous

waste site preliminary assessment (dated March 1, 1987) and assigned the site a high state priority (OEPA 1987).

Previous investigations by OEPA include a potential hazardous waste site identification and preliminary assessment (dated June 3, 1980); a potential hazardous waste site preliminary assessment (undated); and a sanitary landfill inspection (dated December 21, 1972). OEPA noted leachate entering the Black River (OEPA 1972; OEPA 1980) and a strong smell of aromatic compounds (OEPA 1972). Recommendations included a mid-level priority for a site inspection (OEPA 1980) and specifications for a final cover (OEPA 1972).

Previous investigations by E&E include a potential hazardous waste site preliminary assessment (dated January 5, 1983); two potential hazardous waste site inspection reports (dated September 30, 1980 and July 20, 1983); and groundwater well sampling (dated July 19, 1983). Groundwater sampling revealed acetone (7,952 micrograms per liter [$\mu\text{g/L}$]), alpha-benzene hexachloride (alpha-BHC) (12.3 $\mu\text{g/L}$), methylene chloride (2,978 $\mu\text{g/L}$), and a few tentatively identified compounds (E&E 1983c).

The Elyria City Department of Health has conducted several inspections. During a 1972 inspection, the Elyria City Health Department observed that foundry sand and dried sludge were being used as landfill cover and that chemical sludges and barrels of chemical wastes had been disposed of on the surface of the landfill. The landfill was described as poorly covered and graded. It was determined that the equipment used for compacting and covering the landfill was inadequate. In 1972, leachate also was observed entering the Black River from the landfill (Elyria City Department of Health 1972). The leachate was sampled in 1980 (No Author 1980) and was found to contain tetrahydrofuran (366,000 $\mu\text{g/L}$); polychlorinated biphenyls (PCB) (4.0 parts per million); dimethylbenzene (720 $\mu\text{g/L}$); ethylbenzene (260 $\mu\text{g/L}$); 3,3,5-trimethylcyclohexanone (2,300 $\mu\text{g/L}$); 3,3,5-trimethylcyclohexanol (700 $\mu\text{g/L}$); 1,1'-oxybisbenzene (610 $\mu\text{g/L}$); methylenebisbenzenamine (3,700 $\mu\text{g/L}$); and bis(2-ethylhexyl)phthalate (7,500 $\mu\text{g/L}$) (Flopan 1980; No Author 1980).

3.0 ESI ACTIVITIES

This section outlines field observations and sampling procedures at the Ford Road Landfill site. Individual subsections address the reconnaissance and sampling inspections. Rationales for specific ESI activities also are provided. The ESI was conducted in accordance with the SSIP dated May 14, 1993 and the generic quality assurance project plan (QAPjP), dated October 7, 1991, both of which were approved by U.S. EPA. The U.S. EPA Potential Hazardous Waste Site Inspection Report (Form 2070-13) for the Ford Road Landfill site is provided in Appendix A. Photographs taken by PRC during the inspection activities are included in Appendix B.

3.1 SITE RECONNAISSANCE

PRC conducted a site reconnaissance at the Ford Road Landfill site on March 8, 1993. The site reconnaissance consisted of an interview with the site representative and a visual inspection of the site. The purpose of the inspection was to determine appropriate health and safety requirements for on-site sampling activities, evaluate the need for immediate removal actions, choose sampling locations, and locate and evaluate nearby targets.

Mr. Darrold Downey of BFI accompanied PRC on the site reconnaissance. According to Mr. Downey, BFI is closing the landfill by leveling, grading, and seeding it. Clean fill from local construction activities is used for cover material. Piles of clean fill were visible on the surface of the landfill (Photograph Nos. 3, 6, and 7). Mr. Downey explained that the fill material was obtained from a construction site at a local mall. An unknown amount of cover material has been put on the landfill, but Mr. Downey estimated the cover to be between 5 and 8 feet thick. Mr. Downey informed PRC that the landfill is approximately 60 feet deep (PRC 1993).

PRC and BFI then performed the visual inspection. Monitoring of ambient air did not indicate levels of volatile organic compounds (VOC) above background levels. The site includes a very steep cliff along the landfill, adjacent to the banks of the Black River (Photograph Nos. 1 and 9). Because of the steep cliff, the visual inspection did not include the bank of the Black River. Mr. Downey has created a graded access road along the southern boundary to minimize erosion of the landfill surface (Photograph No. 1) (PRC 1993).

Three monitoring wells are located along the access road parallel to the Black River. These wells were last sampled in 1979. Two wells were visible (Photograph Nos. 2 and 4), and the third well was not observed. Mr. Downey indicated that all three wells are usually visible, but the water level of the river was elevated because of recent weather conditions.

PRC proceeded to the northeastern corner of the landfill and noticed a leachate seep, emerging from the landfill face and flowing toward the Black River (Photograph No. 4). PRC went to the northern boundary of the landfill and viewed the riprap that marks the location of the underground sewer main (Photograph Nos. 8 and 9). Directly across the river from the riprap is the sewage pumping station (Photograph No. 8). Finally, PRC walked along Ford Road outside the landfill. Scattered trees and small vegetation grow along Ford Road. The landfill access is partially restricted by a chain barrier along Ford Road, making the landfill inaccessible to vehicular traffic in those areas (Photograph Nos. 5, 6, 7, and 10).

3.2 SAMPLING LOCATIONS AND PROCEDURES

PRC collected three groundwater samples, two surface water samples, six sediment samples, and two soil samples on May 18, 1993. Quality assurance and quality control samples (QA/QC) were also collected. The sampling locations are shown in Figure 3 and summarized in Table 1. Sampling locations and collection procedures were in accordance with the SSIP and generic QAPjP approved by EPA, and with applicable portions of PRC's standard operating procedures (SOP). PRC offered to split all samples with representatives of the Ford Road Landfill site. The offer was accepted for aqueous samples only, by BFI representative Darrold Downey. Photographs 11 through 32 were taken during the May 18, 1993 sampling event. Observations made during the sampling event are noted below.

In May 1993, a drainage pipe was installed into the northeastern face of the landfill to collect runoff and leachate from this area of the landfill and discharge it into the Black River.

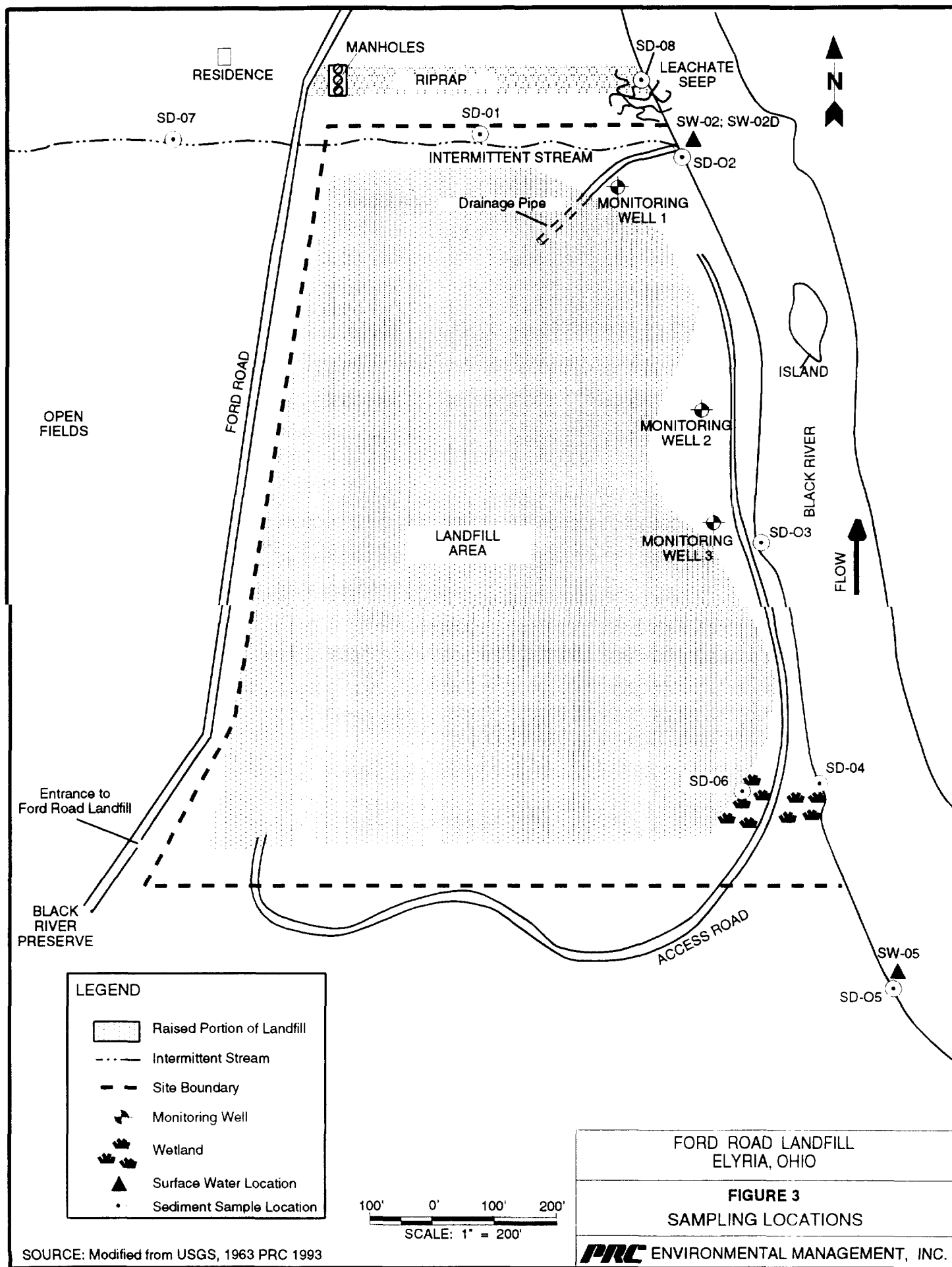


TABLE 1
SAMPLING SUMMARY

Sample Medium/Number	Location	Justification/ <i>Deviation</i>
Ground Water		
MW-01	Monitoring well 1	To determine whether contamination has migrated to the groundwater and to characterize the constituents present at the site. Additional volume was collected for matrix spike/matrix spike duplicate (MS/MSD) for QA/QC purposes.
MW-02	Monitoring well 2	To determine whether contamination has migrated to the groundwater and to characterize the constituents present at the site
MW-03	Monitoring well 3	To determine whether contamination has migrated to the groundwater and to characterize the constituents present at the site
MW-3D	Duplicate of MW-03	To evaluate potential effects of the sampling environment and techniques on analytical reproducibility for QA/QC purposes.
MW-B01	Equipment rinsate blank	To demonstrate the effectiveness of decontamination procedures and to evaluate potential effects of the sampling equipment, containers, and sampling environment on analytical results for QA/QC purposes.
Surface Water		
SW-01 (<i>Not Collected</i>)	Intermittent stream north of the landfill along with SD-01	<i>Insufficient flow in stream to fill the sample containers</i>
SW-02	In the Black River where the drainage pipe discharges leachate to the Black River	To characterize constituents present in surface water where the leachate enters

Table 1 (continued)

Sample Medium/Number	Location	Justification/ <i>Deviation</i>
Surface Water (continued)		
SW-2D	Duplicate of SW-02	To evaluate the potential effects of the sampling environment and techniques on analytical reproducibility for QA/QC purposes.
SW-05	In the Black River 200 feet of the site boundary	To establish background levels and to isolate any surface water contamination from sources upstream of the Ford Road Landfill. (sample designated matrix spike-matrix spike duplicate)
SW-B01	Field equipment rinsate blank	To demonstrate the effectiveness of decontamination procedures and to evaluate potential effects of the sampling equipment, containers, and sampling environment on analytical results for QA/QC purposes
Sediment		
SD-02	In the Black River where the drainage pipe discharges leachate to the Black River	To characterize constituents present in sediments at the point where leachate enters surface water
SD-03	In the Black River adjacent to MW-02	To characterize the extent of any contamination detected
SD-04	In the Black River about 350 feet upstream of SD-03	To characterize the extent of any contamination detected
SD-05	In the Black River about 350 feet upstream of the site boundary	To establish background levels upstream of the site
SD-06	In the wetlands area at the base of the southeast corner of the landfill	To detect contamination in a wetland on site, located at the foot of the southern edge of the landfill
SD-08	Discharge point of the leachate seep near the riprap	To determine the constituents of the leachate and their concentrations where they enter the Black River

Table 1 (continued)

Sample Medium/Number	Location	Justification/ <i>Deviation</i>
Soil		
SD-01	Intermittent stream north of the landfill	To characterize constituents migrating from the landfill to the tributary
SD-07	Upstream of the landfill in the intermittent stream. This sample was originally to be collected from the leachate seep northeast of the landfill ¹	To establish background concentrations for the intermittent tributary and to determine whether there are other off-site sources.
Leachate		
L-07 <i>(Not collected)</i>	Leachate seep northeast of landfill	To determine the constituents of the leachate seep emanating from the landfill. <i>This sample was not obtained because the seep has been covered during regrading.</i>

¹The leachate seep observed during the site reconnaissance was covered over to reduce runoff from the eastern face of the landfill. BFI regraded the eastern face of the landfill and added a drainage pipe (see Figure 2) in the area. Therefore, the location of sample SD-07 was changed to the intermittent stream, upstream of the landfill.

A wetland lies along the southeast base of the landfill (Photograph Nos. 17 and 29). As indicated by drift lines about 5 feet high in the standing vegetation, the area to the east and south of the base of the landfilled area floods frequently (PRC 1993).

Orange-stained sediment was observed in the intermittent stream adjacent to the north boundary of the landfill. In addition, a possible leachate seep was observed at the base of the riprap.

During the sampling visit, no runoff was flowing into the drainage area south of the landfill. The area was used to access sampling points where runoff from the southern portion of the landfill discharges into the Black River via the wetlands.

3.2.1 Groundwater Samples

PRC sampled the three groundwater monitoring wells to determine whether the Ford Road Landfill site has released hazardous substances to groundwater and to characterize constituents attributable to the site. The locks on the three monitoring wells were rusted shut and were subsequently cut off to collect the samples. PRC replaced the locks on all three wells. There was sediment on top of all polyvinyl chloride (PVC) caps inside the casings. Monitoring wells 1 and 2 were tightly capped, while monitoring well 3 was loosely capped. Before sampling, water levels were measured with a water-level probe. The depth to water in monitoring well 1 was 12.58 feet below ground surface (bgs) in monitoring well 1, 8.65 feet bgs in monitoring well 2 and 6.54 feet bgs in monitoring well 3. With a decontaminated submersible pump, each well was purged of a minimum of three well volumes of water. The water from monitoring well 3 was bright orange-brown, after 1 volume (1 gallon) was purged; after 4 volumes, the water remained orange. After 5 volumes, the water became silty brown and, after 10 volumes, became slightly brown and turbid. Monitoring well 2 did not yield sufficient volume to split samples with BFI Industries.

Water samples were collected with a stainless steel bailer and poured into the sample containers. The water sample collected for metal analysis was filtered in the field with a battery-powered peristaltic pump equipped with 0.45-micron disposable filters. A duplicate sample from monitoring well 3 (MW-3D)

was collected to test laboratory and field precision. Equipment rinsate blanks were collected by pouring laboratory-grade water into a decontaminated bailer and transferring the water to the sample containers.

3.2.2 Drinking Water Well Samples

PRC did not sample any drinking water wells during this investigation.

3.2.3 Surface Water Samples

PRC collected two surface water samples (SW-02 and SW-05) from the Black River. SW-02 was taken directly at the outfall to the Black River from the drainage pipe (Photograph No. 25). There was no discharge from the drainage pipe at the time of sampling. The Black River is approximately 75 feet wide, fast moving (in winter), and approximately 1 foot deep at this sample location. A duplicate of this sample was taken. SW-05 was designated the background sample. It was taken upstream of runoff drainage points (Photograph No. 28). This sample was designated the matrix spike-matrix spike duplicate.

3.2.4 Sediment Samples

PRC collected six sediment samples from the Black River and one from the wetlands area at the southern edge of the landfill (see Figure 3). Samples SD-02 through SD-05 were taken in the Black River. Samples SD-02 (see Photograph No. 25), SD-03 (see Photograph No. 26), and SD-04 (see Photograph No. 27), were taken adjacent to the landfill in the Black River. Sediment sample SD-03 was taken in the Black River, directly east of monitoring well 3. The sample was taken at a depth of 4 feet in an area where the Black River is approximately 50 feet wide. Sample SD-04 was taken from the drainage point from the southern portion of the landfill. Sample SD-05 was taken upstream of the landfill and was designated the background sample for the Black River (Photograph No. 28). Sample SD-06 was taken in the wetlands at the base of the landfill, on the southern edge of the landfill, north of the access road (Photograph No. 29). Sample SD-08 was taken at the discharge point of the leachate seep, near the riprap (Photograph No. 31). The sediment was orange and had an organic odor.

3.2.5 Soil Samples

Using stainless-steel scoops, PRC collected two soil samples from the ground surface. Soil samples were collected to identify hazardous substances on the site and to identify areas of surficial soil contamination where workers or nearby residents could be exposed to contaminated soil. Soil samples SD-01 and SD-07 were taken in the dry bed of the intermittent stream north of the landfill. Soil sample SD-01 was taken approximately 300 feet from the Black River (Photograph No. 24), in an area where the soil was discolored orange. Sample SD-07 was taken 200 feet west of Ford Road and the northwest corner of the site, outside the influence of the landfill as a background sample for the intermittent stream (Photograph No. 30).

4.0 ANALYTICAL RESULTS

All samples collected during the ESI were analyzed through the U.S. EPA Contract Laboratory Program (CLP). The laboratories analyzed for U.S. EPA target compound list (TCL) volatile organic compounds (VOC), extractable semivolatile organic compounds (SVOC), pesticides, and PCBs. The samples also were analyzed for target analyte list (TAL) inorganic substances (metals and cyanide). All data were reviewed by EPA Region 5 for compliance with the terms of the CLP. The laboratory results are summarized in Appendix D.

The concentrations of substances detected in the environmental samples were compared with background concentrations to determine which results were significantly elevated. The significant results are presented in Tables 2 and 3.

4.1 MONITORING WELL SAMPLES

The analytical results of groundwater samples collected from the three on-site monitoring wells are summarized in Table D-1. The significant findings are presented in Table 2. Using the analytical results from monitoring well sample MW-03 as background, both acetone and 1,1 dichloroethene were significantly elevated in sample MW-01. Acetone, however, may be the result of laboratory contamination because it was also detected in the laboratory blank.

No TCL SVOCs, pesticides or PCBs were significantly elevated in any of the monitoring well samples.

Arsenic, nickel, and sodium were significantly elevated in both MW-01 and MW-02 samples. Cobalt, iron and manganese were elevated in the MW-01 sample; barium and potassium were elevated in the MW-02 sample (Table 2).

TABLE 2
SIGNIFICANT FINDINGS OF MONITORING WELL SAMPLE ANALYSES

FORD ROAD LANDFILL

Sampling Location		MW-01	MW-02	MW-03	MW-3D	MW-B01	MW-TB-01
Date		05/18/93	05/18/93	05/18/93	05/18/93	05/18/93	05/18/93
Time		1745	1915	1517	1517	1615	1615
Organic Traffic Report No.		93ZF53S11	93ZF53S12	93ZF53S13	93ZF53D13	93ZF53R03	93ZF53R04
Inorganic Traffic Report No.		93ZF53S11	93ZF53S12	93ZF53S13	93ZF53D13	93ZF53R03	93ZF53R04
Sample Type		Environmental Groundwater	Environmental Groundwater	Environmental Groundwater	Field Duplicate	Field Blank	Trip Blank
VOLATILE ORGANIC COMPOUNDS	CRQL						
acetone	10	23	10 U	12 BU	2U	190 B	64 BU
1,1-dichloroethane	10	21	2U	2U	2U	2U	2U
SEMIVOLATILE ORGANIC COMPOUNDS	CRQL						
No significant compounds identified.							
ANALYTE DETECTED	CRDL						
arsenic	10	10	24	3	2	2U	--
barium	200	52.9	112	28.7	28.3	7.0 U	--
cobalt	50	44.2	7.0 U	7.0 U	7.0 U	7.0 U	--
iron	100	23,600	3,840	1,710	1,760	98.0 U	--
manganese	15	4,550	1,720	639	634	6.0 U	--
nickel	40	65.9	60.9	24.0 U	24.0 U	24.0 U	--
potassium	5,000	6,100 U	155,000	19,900	19,700	6,100 U	--
sodium	5,000	169,000	511,000	47,500	47,300	1,200 U	--

Notes:

Numbers in boldface represent significant findings.

All concentrations are in micrograms per liter ($\mu\text{g/L}$) unless otherwise noted.

CRQL = Contract-required quantitation limit

CRDL = Contract-required detection limit

-- = Not analyzed

GENERAL QUALIFIERS	DEFINITION
U	The compound or analyte was analyzed for but not detected. Associated value is the sample quantitation limit (SQL).
COMPOUND QUALIFIERS	DEFINITION
B	Compound was detected in an associated laboratory blank.

4.2 SURFACE WATER SAMPLES

Surface-water sampling conducted on May 18, 1993 revealed no hazardous substances at levels above background concentrations. However, sediment sampling conducted on May 18, 1993 revealed SVOCs, PCBs, and metals, as discussed below.

4.3 SEDIMENT SAMPLES

The analytical results of the surface water sampling are summarized in Table D-2 in Appendix D. No compound or analyte appeared to be significantly elevated above background.

Numerous SVOCs were reported in the eight sediment samples collected (see Table D-3 in Appendix D). The majority of the compounds were polynuclear aromatic hydrocarbons (PAH) such as fluoranthene, phenanthrene, chrysene, and benzo(a)pyrene. Most of these compounds were detected at concentrations below the sample quantitation limit (SQL). The concentrations of these compounds were thus assigned estimated values and are flagged with a "J" qualifier in the data tables. All of the PAHs reported in the background sample SD-05 were qualified in this manner. Because the analytical bias of the J-qualified background data is unknown, the reported values are not usable for HRS scoring purposes. Instead, downstream samples were compared with the SQL of the background sample to determine whether a concentration was significant.

Using the SQL of the background sample SD-05 (560 micrograms per kilogram [$\mu\text{g}/\text{kg}$]), none of the downstream samples contain levels of the semivolatiles greater than three times the background SQL. The highest levels detected (1,200 $\mu\text{g}/\text{kg}$ fluoranthene in SD-06 and SD-08) are only 2.14 times higher than the background SQL (560 $\mu\text{g}/\text{kg}$) and, therefore, are not considered significant (Federal Register 1990, Table 2-3).

The pesticides delta-BHC and alpha chlordane were significantly elevated in sediment sample SD-08 collected in the Black River at the point of entry of the leachate seep (see Table 3). The PCB aroclor 1254 was significantly elevated (1,100 $\mu\text{g}/\text{kg}$) in sediment sample SD-06 collected from the wetland at the southeast corner of the site.

**TABLE 3
SIGNIFICANT FINDINGS OF SOIL AND SEDIMENT SAMPLE ANALYSES**

FORD ROAD LANDFILL

SIGNIFICANT FINDINGS OF SOIL AND SEDIMENT SAMPLE ANALYSES		SD-07	SD-01	SD-05	SD-02	SD-03	SD-04	SD-06	SD-08	
Sampling Location		05/18/93	05/18/93	05/18/93	05/18/93	05/18/93	05/18/93	05/18/93	05/18/93	
Date		2005	1425	1715	1330	1560	1640	1500	1400	
Time		EWG91	EWG85	EWG89	EWG86	EWG87	EWG88	EWG90	EWG92	
Organic Traffic Report No.		METW91	METW85	METW89	METW86	METW87	METW88	METW90	METW92	
Inorganic Traffic Report No.		Background Int. Stream	Environmental Int. Stream	Background Black River	Environmental Black River	Environmental Black River	Environmental Black River	Environmental Wetland	Environmental Black River	
Sample Type		Med. Brown	Orange	Med. Brown	Med. Brown	Med. Brown	Med. Brown	Dk. Brown	Orange	
Appearance										
VOLATILE ORGANIC COMPOUNDS		CRQL								
No significant compounds identified.										
SEMIVOLATILE ORGANIC COMPOUNDS		CRQL								
No significant compounds identified.										
PESTICIDES/PCB COMPOUNDS		CRQL								
delta-BHC		1.7	2.0 U	2.7 U	2.9 U	1.2 JPX?	1.4 JPX?	2.9 U	6.1 U	110 PJ?
alpha-chlordane		1.7	2.0 U	2.7 U	2.9 U	2.1 U	2.6 U	2.9 U	5.4 JPX?	100 PJ?
Aroclor-1254		33.0	38 U	50 J?	56 U	38 PJ?	50 U	56 U	1,100	560 U
ANALYTE DETECTED (mg/L)		CRDL								
arsenic		2	7.5	10.0	8.5	9.1	45.4	6.9	8.8	6.8
barium		40	58.9	91.4	96.3	39.6 B	159	88.8	701	64.7 B
calcium		1,000	1,520	14,800	2,220	3,530	2,570	2,500	66,800	8,610
lead		0.6	14.8 *	62.6 *	58.2 *	27.2 *	52.8 *	78.5 *	298 S*	54.4 S*
manganese		3	195	1,430	153	193	134	126	862	217
nickel		8	21.7	135	40.7	61.1	28.1	44.3	111	112
zinc		4	61.4	196	293	141	280	295	1,120	251

Notes:

Numbers in boldface represent significant findings.

All concentrations are in micrograms per kilogram (µg/kg) unless otherwise noted.

CRQL = Contract-required quantitation limit

CRDL = Contract-required detection limit

GENERAL QUALIFIERS	DEFINITION
J	Value is estimated (also indicates a compound that is detected below the CRQL).
?	Analytical bias is unknown.
U	The compound or analyte was analyzed for but not detected. Associated value is the sample quantitation limit (SQL).
COMPOUND QUALIFIERS	DEFINITION
P	Variance between GC columns was greater than 25 percent in pesticide or Aroclor (PCB) analyses. The lower value is reported.
X	Reported compound coelutes with PCB Aroclor peaks on one or both analytical columns.
ANALYTE QUALIFIERS	DEFINITION
B	Value is below the CRDL.
*	Duplicate relative percent difference values were outside of control limits.
S	Analyte concentration was determined by Method of Standard Additions (MSA).

Six inorganic substances were significantly elevated above background in sediment samples collected along the Black River and in the adjacent wetland. Substances whose concentrations exceeded three times background include lead (298 milligrams per kilogram [mg/kg] in SD-06), arsenic (45.4 mg/kg in SD-03), barium (701 mg/kg in SD-06), manganese (862 mg/kg in SD-06), and zinc (1,120 mg/kg in SD-06). Calcium and nickel were significantly elevated in both SD-06 and SD-08 (66,800 and 111 mg/kg, and 8,610 and 112 mg/kg, respectively).

4.4 SOIL SAMPLES

Two soil samples were collected from the dry bed of the intermittent stream north of the landfill. Sample SD-01 was taken from a location adjacent to the landfill, and sample SD-07 was taken upstream of the landfill. Sample SD-01 contained levels of calcium, lead, manganese, nickel and zinc at concentrations greater than three times those present in sample SD-07 and sample SD-05 (upstream in the Black River) (see Table D-3 in Appendix D).

4.5 ATTRIBUTION

A total of 14 substances were detected in environmental samples collected from the Ford Road Landfill at levels significantly above background. Acetone, 1,1-dichloroethane, potassium, and sodium were elevated in the groundwater samples; Aroclor 1254, delta-BHC, alpha chlordane, calcium, lead and zinc were elevated in the sediments. Arsenic, barium, manganese and nickel were significantly elevated in both sediment and groundwater.

Many of these substances can reasonably be attributed to industrial hazardous waste disposal. Hazardous wastes disposed of in the landfill included sewer sludge, paint sludge, latex sludge, and miscellaneous solvents, resins, oils, elastomers, acrylates, and unspecified organic and inorganic compounds.

5.0 PATHWAYS

This section discusses sources, pathways, and targets. The four pathways are groundwater migration, surface water migration, soil exposure, and air migration.

5.1 GROUNDWATER MIGRATION PATHWAY

The Ford Road Landfill is unlined. The site's potential to release leachate to groundwater is considered high; however groundwater is not used for drinking in Lorain County (Desanti 1985). The bedrock in the area consists of relatively impermeable shale and ranges from 12 to 50 feet deep (E&E 1981; E&E 1983b). The shale bedrock is overlain by impermeable deposits of clay (ODNR 1980). The three monitoring wells located on site are screened in the shale unit (E&E 1983b; OEPA 1982). Groundwater flow at the site is expected to be north or northeast toward the Black River (E&E 1981).

5.2 SURFACE WATER MIGRATION PATHWAY

The Black River flows into Lake Erie approximately 11 miles north of the Ford Road Landfill. The flow of the Black River in the Elyria area is 333 cubic feet per second (USGS 1993b). A drinking water intake that serves 76,000 people is located in Lake Erie 11.2 miles from the Ford Road Landfill (Desantis 1986).

Surface water runoff from the landfill flows in three directions: from the northern portion of the landfill to the intermittent stream; from the eastern portion of the landfill to the Black River; and from the southern portion of the landfill to the ravine and wetland. There is evidence of migration of hazardous substances from the Ford Road Landfill to the Black River. Leachate seeps have been observed entering the Black River on numerous occasions, including during the ESI site reconnaissance and sampling visit (E&E 1980; E&E 1983a; E&E 1983b; Elyria City Department of Health 1972; No Author 1980; OEPA 1972). Leachate from the northern portion of the landfill is collected in a drainage pipe which discharges into the Black River at the northeast corner of the landfill. There is no permit for this discharge. The landfill is located within the 100-year flood plain, and evidence of flooding along the edge of the landfill was observed during the sampling event.

Analysis of surface water samples taken on May 18, 1993 revealed no hazardous substances at levels above background concentrations. However, analysis of sediment samples taken on May 18, 1993 from the Black River and adjoining wetlands revealed Aroclor 1254 and metals such as arsenic, barium, lead, nickel, and zinc at levels three times above background. Heavy metals were known to have been a constituent of wastes deposited in the Ford Road Landfill (BFI 1981; OEPA 1980; Gulf Oil Company 1981; BF Goodrich 1981). PCBs have been detected in leachate samples previously collected (Flopan 1980).

The Black River is a fishery; however, the amount in pounds of human food chain organisms caught from the Black River has not been documented. Sensitive environments associated with the Black River include the habitat of a threatened species, *Ichthyomyzon unicuspis*, located 11 miles downstream of the Ford Road Landfill (ODNR, 1993b). No extensive wetlands have been identified along the Black River.

5.3 SOIL EXPOSURE PATHWAY

The surface of the landfill is covered with 5 to 8 feet of clean fill and clay. The surface has been seeded and is now covered with some light vegetation (PRC 1993). The nearby population is sparse; approximately 2,500 residents live within 1 mile of the site, as indicated by a topographic map and census data (USGS 1993; U.S. Department of the Census 1993a; U.S. Department of the Census 1993b). The site has one part-time worker. The landfill is slightly accessible but serves no public recreational use.

5.4 AIR MIGRATION PATHWAY

The site's potential to release hazardous substances to air is probably low because the landfill surface is below 5 to 8 feet of cover material. Approximately 95,000 residents live within a 4-mile radius of the landfill, as indicated by a house count from a topographic map and on census data (USGS 1993a; U.S. Department of the Census 1993b).

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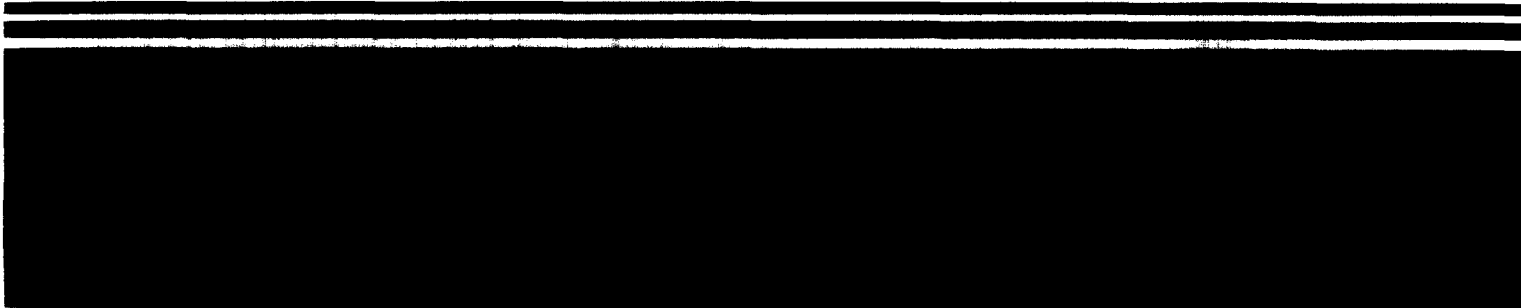
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APPENDIX A
U.S. EPA POTENTIAL HAZARDOUS WASTE
SITE INSPECTION FORM
(FORM 2070-13)
(16 Pages)



Potential Hazardous Waste Site

Site Inspection Report





Site Inspection Report



POTENTIAL HAZARDOUS WASTE SITE
SITE INSPECTION REPORT
PART 1 - SITE LOCATION AND INSPECTION INFORMATION

I. IDENTIFICATION

01 STATE OH 02 SITE NUMBER
OHD 980 510 002

II. SITE NAME AND LOCATION

01 SITE NAME (Legal, common, or descriptive name of site) Ford Road Landfill		02 STREET, ROUTE NO., OR SPECIFIC LOCATION IDENTIFIER				
03 CITY Elyria		04 STATE OH	05 ZIP CODE 44035	06 COUNTY Lorain	07 COUNTY CODE 093	08 CONG. DIST. 13
09 COORDINATES LATITUDE 41 22 30.0 N	LONGITUDE 82 00 00.0 W	10 TYPE OF OWNERSHIP (Check one) <input type="checkbox"/> A. PRIVATE <input type="checkbox"/> B. FEDERAL <input type="checkbox"/> C. STATE <input checked="" type="checkbox"/> D. COUNTY <input type="checkbox"/> E. MUNICIPAL <input type="checkbox"/> F. OTHER <input type="checkbox"/> G. UNKNOWN				

III. INSPECTION INFORMATION

01 DATE OF INSPECTION 5 / 18 / 93 MONTH DAY YEAR	02 SITE STATUS <input type="checkbox"/> ACTIVE <input checked="" type="checkbox"/> INACTIVE	03 YEARS OF OPERATION ≈ 1950 1974 BEGINNING YEAR ENDING YEAR UNKNOWN
--	---	---

04 AGENCY PERFORMING INSPECTION (Check all that apply)

<input type="checkbox"/> A. EPA	<input checked="" type="checkbox"/> B. EPA CONTRACTOR PRC Environmental Management, Inc. (Name of Firm)	<input type="checkbox"/> C. MUNICIPAL	<input type="checkbox"/> D. MUNICIPAL CONTRACTOR (Name of Firm)
<input type="checkbox"/> E. STATE	<input type="checkbox"/> F. STATE CONTRACTOR (Name of Firm)	<input type="checkbox"/> G. OTHER (Specify)	

05 CHIEF INSPECTOR Donna Davies	06 TITLE Environmental Scientist	07 ORGANIZATION PRC	08 TELEPHONE NO. (215) 972-0446
09 OTHER INSPECTORS Alicia Shultz	10 TITLE Biologist	11 ORGANIZATION PRC	12 TELEPHONE NO. (215) 972-0421
Gabe Rood	Project Manager	PRC	(513) 241-0149
Greg Stacy	Geologist	PRC	(513) 241-0149
Guy Montfort	Geologist	PRC	(513) 241-0149
			()

13 SITE REPRESENTATIVES INTERVIEWED Darrold Downey	14 TITLE Landfill Operations Manager	15 ADDRESS 43502 Rt. 20 East Oberlin, OH 44074	16 TELEPHONE NO. (216) 774-4060
			()
			()
			()
			()
			()
			()

17 ACCESS GAINED BY: (Check one) <input checked="" type="checkbox"/> PERMISSION <input type="checkbox"/> WARRANT	18 TIME OF INSPECTION 9:30 am	19 WEATHER CONDITIONS overcast, cool, ≈ 65°F
---	----------------------------------	---

IV. INFORMATION AVAILABLE FROM

01 CONTACT Bob Princic	02 OF (Agency/Organization) EPA Northeast District Office	03 TELEPHONE NO. (215) 963-1155
04 PERSON RESPONSIBLE FOR SITE INSPECTION FORM Cathy Cooney	05 AGENCY U.S.	06 ORGANIZATION PRC Environmental Management, Inc.
		07 TELEPHONE NO. (215) 972-0470
		08 DATE 10/04/93 MONTH DAY YEAR



POTENTIAL HAZARDOUS WASTE SITE
SITE INSPECTION REPORT
PART 3 - DESCRIPTION OF HAZARDOUS CONDITIONS AND INCIDENTS

I. IDENTIFICATION

01 STATE OH	02 SITE NUMBER OHD 980 510 002
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II. HAZARDOUS CONDITIONS AND INCIDENTS

01 <input type="checkbox"/> A. GROUNDWATER CONTAMINATION	02 <input type="checkbox"/> OBSERVED (DATE: _____)	<input checked="" type="checkbox"/> POTENTIAL	<input type="checkbox"/> ALLEGED
03 POPULATION POTENTIALLY AFFECTED: <u>0</u>	04 NARRATIVE DESCRIPTION		

There are no groundwater drinking water wells in use in northern Lorain County.

01 <input checked="" type="checkbox"/> B. SURFACE WATER CONTAMINATION	02 <input checked="" type="checkbox"/> OBSERVED (DATE: <u>5/18/93</u>)	<input type="checkbox"/> POTENTIAL	<input type="checkbox"/> ALLEGED
03 POPULATION POTENTIALLY AFFECTED: <u>76,000</u>	04 NARRATIVE DESCRIPTION		

Leachate was observed entering the Black River. A surface water intake is located 11.2 miles downstream.

01 <input checked="" type="checkbox"/> C. CONTAMINATION OF AIR	02 <input type="checkbox"/> OBSERVED (DATE: _____)	<input type="checkbox"/> POTENTIAL	<input type="checkbox"/> ALLEGED
03 POPULATION POTENTIALLY AFFECTED: <u>Unknown</u>	04 NARRATIVE DESCRIPTION		

The landfill is capped with 5 to 8 feet of cover material.

01 <input checked="" type="checkbox"/> D. FIRE/EXPLOSIVE CONDITIONS	02 <input type="checkbox"/> OBSERVED (DATE: _____)	<input type="checkbox"/> POTENTIAL	<input type="checkbox"/> ALLEGED
03 POPULATION POTENTIALLY AFFECTED: _____	04 NARRATIVE DESCRIPTION		

None suspected.

01 <input checked="" type="checkbox"/> E. DIRECT CONTACT	02 <input type="checkbox"/> OBSERVED (DATE: _____)	<input checked="" type="checkbox"/> POTENTIAL	<input type="checkbox"/> ALLEGED
03 POPULATION POTENTIALLY AFFECTED: <u>1</u>	04 NARRATIVE DESCRIPTION		

Potential direct contact by way of leachate seeps; one worker on site

01 <input checked="" type="checkbox"/> F. CONTAMINATION OF SOIL	02 <input type="checkbox"/> OBSERVED (DATE: _____)	<input checked="" type="checkbox"/> POTENTIAL	<input type="checkbox"/> ALLEGED
03 AREA POTENTIALLY AFFECTED: <u>Unknown</u> (Acres)	04 NARRATIVE DESCRIPTION		

Soil samples obtained during most recent sampling event revealed high metal concentrations in one sample.

01 <input checked="" type="checkbox"/> G. DRINKING WATER CONTAMINATION	02 <input type="checkbox"/> OBSERVED (DATE: _____)	<input checked="" type="checkbox"/> POTENTIAL	<input type="checkbox"/> ALLEGED
03 POPULATION POTENTIALLY AFFECTED: <u>76,000</u>	04 NARRATIVE DESCRIPTION		

Drinking water intake is located 11.2 miles downstream.

01 <input checked="" type="checkbox"/> H. WORKER EXPOSURE/INJURY	02 <input type="checkbox"/> OBSERVED (DATE: _____)	<input checked="" type="checkbox"/> POTENTIAL	<input type="checkbox"/> ALLEGED
03 POPULATION POTENTIALLY AFFECTED: <u>1</u>	04 NARRATIVE DESCRIPTION		

Leachate seeps present potential threat of direct contact; steep slopes present potential for slip and fall hazard.

01 <input checked="" type="checkbox"/> I. POPULATION EXPOSURE/INJURY	02 <input type="checkbox"/> OBSERVED (DATE: _____)	<input type="checkbox"/> POTENTIAL	<input type="checkbox"/> ALLEGED
03 POPULATION POTENTIALLY AFFECTED: _____	04 NARRATIVE DESCRIPTION		

None suspected.



POTENTIAL HAZARDOUS WASTE SITE
SITE INSPECTION REPORT
PART 3 - DESCRIPTION OF HAZARDOUS CONDITIONS AND INCIDENTS

I. IDENTIFICATION

01 STATE OH	02 SITE NUMBER OHD 980 510 002
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II. HAZARDOUS CONDITIONS AND INCIDENTS *(Continued)*

01 <input type="checkbox"/> J. DAMAGE TO FLORA 04 NARRATIVE DESCRIPTION	02 <input type="checkbox"/> OBSERVED (DATE: _____)	<input type="checkbox"/> POTENTIAL	<input type="checkbox"/> ALLEGED
--	--	------------------------------------	----------------------------------

None suspected.

01 <input type="checkbox"/> K. DAMAGE TO FAUNA 04 NARRATIVE DESCRIPTION <i>(Include name(s) of species)</i>	02 <input type="checkbox"/> OBSERVED (DATE: _____)	<input type="checkbox"/> POTENTIAL	<input type="checkbox"/> ALLEGED
--	--	------------------------------------	----------------------------------

None suspected.

01 <input checked="" type="checkbox"/> L. CONTAMINATION OF FOOD CHAIN 04 NARRATIVE DESCRIPTION	02 <input type="checkbox"/> OBSERVED (DATE: <u>5/18/93</u>)	<input checked="" type="checkbox"/> POTENTIAL	<input type="checkbox"/> ALLEGED
---	--	---	----------------------------------

Leachate seep was observed entering the Black River. The Black River is a fishery.

01 <input checked="" type="checkbox"/> M. UNSTABLE CONTAINMENT OF WASTES <i>(Spills/Runoff/Standing liquids, Leaking Drums)</i> 03 POPULATION POTENTIALLY AFFECTED: <u>Unknown</u>	02 <input type="checkbox"/> OBSERVED (DATE: _____)	<input checked="" type="checkbox"/> POTENTIAL	<input type="checkbox"/> ALLEGED
--	--	---	----------------------------------

04 NARRATIVE DESCRIPTION

Steep slopes aid in runoff and erosion of face of landfill.

01 <input type="checkbox"/> N. DAMAGE TO OFFSITE PROPERTY 04 NARRATIVE DESCRIPTION	02 <input type="checkbox"/> OBSERVED (DATE: _____)	<input type="checkbox"/> POTENTIAL	<input type="checkbox"/> ALLEGED
---	--	------------------------------------	----------------------------------

None suspected.

01 <input type="checkbox"/> O. CONTAMINATION OF SEWERS, STORM DRAINS, WWTPs 04 NARRATIVE DESCRIPTION	02 <input type="checkbox"/> OBSERVED (DATE: _____)	<input checked="" type="checkbox"/> POTENTIAL	<input type="checkbox"/> ALLEGED
---	--	---	----------------------------------

A drainage pipe that was installed in the summer of 1993 drains the landfill.

01 <input checked="" type="checkbox"/> P. ILLEGAL/UNAUTHORIZED DUMPING 04 NARRATIVE DESCRIPTION	02 <input type="checkbox"/> OBSERVED (DATE: _____)	<input type="checkbox"/> POTENTIAL	<input type="checkbox"/> ALLEGED
--	--	------------------------------------	----------------------------------

Midnight dumping may have occurred.

05 DESCRIPTION OF ANY OTHER KNOWN, POTENTIAL, OR ALLEGED HAZARDS

None.

III. TOTAL POPULATION POTENTIAL AFFECTED: _____

IV. COMMENTS

None.

V. SOURCES OF INFORMATION *(Cite specific references, e.g., state files, sample analysis, reports)*

CERCLIS file, field sampling activities performed by PRC May 18, 1993, and analysis of samples collected by PRC



POTENTIAL HAZARDOUS WASTE SITE
SITE INSPECTION REPORT
PART 4 - PERMIT AND DESCRIPTIVE INFORMATION

I. IDENTIFICATION

01 STATE OH 02 SITE NUMBER OHD 980 510 002

II. PERMIT INFORMATION

01 TYPE OF PERMIT ISSUED (Check all that apply)	02 PERMIT NUMBER	03 DATE ISSUED	04 EXPIRATION DATE	05 COMMENTS
<input type="checkbox"/> A. NPOES				
<input type="checkbox"/> B. UIC				
<input type="checkbox"/> C. AIR				
<input type="checkbox"/> D. RCRA				
<input type="checkbox"/> E. RCRA INTERIM STATUS				
<input type="checkbox"/> F. SPCC PLAN				
<input type="checkbox"/> G. STATE (Specify)				
<input type="checkbox"/> H. LOCAL (Specify)				
<input type="checkbox"/> I. OTHER (Specify)				
<input checked="" type="checkbox"/> J. NONE				

III. SITE DESCRIPTION

01 STORAGE/DISPOSAL (Check all that apply)	02 AMOUNT	03 UNIT OF MEASURE	04 TREATMENT (Check all that apply)	05 OTHER
<input type="checkbox"/> A. SURFACE IMPOUNDMENT			<input type="checkbox"/> A. INCINERATION	<input type="checkbox"/> A. BUILDINGS ON SITE
<input type="checkbox"/> B. PILES			<input type="checkbox"/> B. UNDERGROUND INJECTION	None
<input type="checkbox"/> C. DRUMS, ABOVE GROUND			<input type="checkbox"/> C. CHEMICAL/PHYSICAL	
<input type="checkbox"/> D. TANK, ABOVE GROUND			<input type="checkbox"/> D. BIOLOGICAL	
<input type="checkbox"/> E. TANK, BELOW GROUND			<input type="checkbox"/> E. WASTE OIL PROCESSING	06 AREA OF SITE
<input checked="" type="checkbox"/> F. LANDFILL	15	acres	<input type="checkbox"/> F. SOLVENT RECOVERY	
<input type="checkbox"/> G. LANDFARM			<input type="checkbox"/> G. OTHER RECYCLING/RECOVERY	
<input type="checkbox"/> H. OPEN DUMP			<input type="checkbox"/> H. OTHER (Specify)	15 (Acres)
<input type="checkbox"/> I. OTHER (Specify)				

07 COMMENTS

IV. CONTAINMENT

01 CONTAINMENT OF WASTES (Check one)

☐ A. ADEQUATE, SECURE ☒ B. MODERATE ☐ C. INADEQUATE, POOR ☐ D. INSECURE, UNSOUND, DANGEROUS

02 DESCRIPTION OF DRUMS, DIKING, LINERS, BARRIERS, ETC.

The landfill is not lined. Steep slopes aid runoff and create an erosion potential. The landfill is covered with 5 to 8 feet of cover material.

V. ACCESSIBILITY

01 WASTE EASILY ACCESSIBLE: ☐ YES ☒ NO

02 COMMENTS

Wastes are under 5 - 8 feet of cover material. However, a drainage pipe drains leachate from the northern portion of the landfill directly into the Black River.

VI. SOURCES OF INFORMATION (Cite specific references, e.g., state files, sample analysis, reports)

CERCLIS file, field sampling activities performed by PRC May 18, 1993, and analysis of samples collected by PRC



POTENTIAL HAZARDOUS WASTE SITE
SITE INSPECTION REPORT
PART 5 - WASTE, DEMOGRAPHIC, AND ENVIRONMENTAL DATA

I. IDENTIFICATION

01 STATE
OH

02 SITE NUMBER
OHD 980 510 002

II. DRINKING WATER SUPPLY

01 TYPE OF DRINKING SUPPLY <i>(Check as appropriate)</i>	02 STATUS	03 DISTANCE TO SITE															
<table><tr><td>SURFACE</td><td>WELL</td></tr><tr><td>COMMUNITY A. <input checked="" type="checkbox"/></td><td>B. <input type="checkbox"/></td></tr><tr><td>NON-COMMUNITY C. <input type="checkbox"/></td><td>D. <input type="checkbox"/></td></tr></table>	SURFACE	WELL	COMMUNITY A. <input checked="" type="checkbox"/>	B. <input type="checkbox"/>	NON-COMMUNITY C. <input type="checkbox"/>	D. <input type="checkbox"/>	<table><tr><td>ENDANGERED</td><td>AFFECTED</td><td>MONITORED</td></tr><tr><td>A. <input type="checkbox"/></td><td>B. <input type="checkbox"/></td><td>C. <input type="checkbox"/></td></tr><tr><td>D. <input type="checkbox"/></td><td>E. <input type="checkbox"/></td><td>F. <input type="checkbox"/></td></tr></table>	ENDANGERED	AFFECTED	MONITORED	A. <input type="checkbox"/>	B. <input type="checkbox"/>	C. <input type="checkbox"/>	D. <input type="checkbox"/>	E. <input type="checkbox"/>	F. <input type="checkbox"/>	A. <u>11.2</u> (mi) B. <u>1</u> (mi)
SURFACE	WELL																
COMMUNITY A. <input checked="" type="checkbox"/>	B. <input type="checkbox"/>																
NON-COMMUNITY C. <input type="checkbox"/>	D. <input type="checkbox"/>																
ENDANGERED	AFFECTED	MONITORED															
A. <input type="checkbox"/>	B. <input type="checkbox"/>	C. <input type="checkbox"/>															
D. <input type="checkbox"/>	E. <input type="checkbox"/>	F. <input type="checkbox"/>															

III. GROUNDWATER

01 GROUNDWATER USE IN VICINITY *(Check one)*

<input checked="" type="checkbox"/> A. ONLY SOURCE FOR DRINKING	<input type="checkbox"/> B. DRINKING <i>(Other sources available)</i> COMMERCIAL, INDUSTRIAL, IRRIGATION <i>(No other water sources available)</i>	<input type="checkbox"/> C. COMMERCIAL, INDUSTRIAL, IRRIGATION <i>(Limited other sources available)</i>	<input type="checkbox"/> D. NOT USED, UNUSEABLE
---	---	--	---

02 POPULATION SERVED BY GROUND WATER <u>0</u>	03 DISTANCE TO NEAREST DRINKING WATER WELL <u>1</u> (mi)			
04 DEPTH TO GROUNDWATER <u>10</u> (ft)	05 DIRECTION OF GROUNDWATER FLOW <u>East</u>	06 DEPTH TO AQUIFER OF CONCERN <u>10</u> (ft)	07 POTENTIAL YIELD OF AQUIFER <u>Unknown</u> (gpd)	08 SOLE SOURCE AQUIFER <input type="checkbox"/> YES <input checked="" type="checkbox"/> NO

09 DESCRIPTION OF WELLS *(Including usage, depth, and location relative to population and buildings)*

There are 3 monitoring wells on east side of the landfill, all finished at the top of the shale bedrock interface.

10 RECHARGE AREA <input checked="" type="checkbox"/> YES <input type="checkbox"/> NO COMMENTS Landfill	11 DISCHARGE AREA <input type="checkbox"/> YES <input checked="" type="checkbox"/> NO COMMENTS Black River
---	---

IV. SURFACE WATER

01 SURFACE WATER USE *(Check one)*

<input checked="" type="checkbox"/> A. RESERVOIR, RECREATION DRINKING WATER SOURCE	<input type="checkbox"/> B. IRRIGATION, ECONOMICALLY IMPORTANT RESOURCES	<input type="checkbox"/> C. COMMERCIAL, INDUSTRIAL	<input type="checkbox"/> D. NOT CURRENTLY USED
---	---	--	--

02 AFFECTED/POTENTIALLY AFFECTED BODIES OF WATER

NAME:	AFFECTED	DISTANCE TO SITE
<u>Black River</u>	<input checked="" type="checkbox"/>	<u>0</u> (mi)
<u>Lake Erie</u>	<input type="checkbox"/>	<u>11.0</u> (mi)

V. DEMOGRAPHIC AND PROPERTY INFORMATION

01 TOTAL POPULATION WITHIN	02 DISTANCE TO NEAREST POPULATION									
<table><tr><td>ONE (1) MILE OF SITE</td><td>TWO (2) MILES OF SITE</td><td>THREE (3) MILES OF SITE</td></tr><tr><td>A. <u>≈ 2,500</u></td><td>B. <u>≈ 30,000</u></td><td>C. <u>≈ 65,000</u></td></tr><tr><td>NO. OF PERSONS</td><td>NO. OF PERSONS</td><td>NO. OF PERSONS</td></tr></table>	ONE (1) MILE OF SITE	TWO (2) MILES OF SITE	THREE (3) MILES OF SITE	A. <u>≈ 2,500</u>	B. <u>≈ 30,000</u>	C. <u>≈ 65,000</u>	NO. OF PERSONS	NO. OF PERSONS	NO. OF PERSONS	<u>0.01</u> (mi)
ONE (1) MILE OF SITE	TWO (2) MILES OF SITE	THREE (3) MILES OF SITE								
A. <u>≈ 2,500</u>	B. <u>≈ 30,000</u>	C. <u>≈ 65,000</u>								
NO. OF PERSONS	NO. OF PERSONS	NO. OF PERSONS								
03 NUMBER OF BUILDINGS WITHIN TWO (2) MILES OF SITE <u>6,000</u>	04 DISTANCE TO NEAREST OFF-SITE BUILDING <u>0.01</u> (mi)									

05 POPULATION WITHIN VICINITY OF SITE *(Provide narrative description of nature of population within vicinity of site, e.g., rural, village, densely populated urban area)*

The site is located on the northern edge of the city of Elyria. Population density to the south and east is typically suburban. The area to the north and west (within one mile) is fairly open.



POTENTIAL HAZARDOUS WASTE SITE
SITE INSPECTION REPORT
PART 5 - WASTE, DEMOGRAPHIC, AND ENVIRONMENTAL DATA

I. IDENTIFICATION

01 STATE
OH

02 SITE NUMBER
OHD 980 510 002

VI. ENVIRONMENTAL INFORMATION

01 PERMEABILITY OF UNSATURATED ZONE (Check one)

☐ A. 10^{-6} - 10^{-5} cm/sec ☒ B. 10^{-4} - 10^{-5} cm/sec ☐ C. 10^{-4} - 10^{-3} cm/sec ☐ D. GREATER THAN 10^{-3} cm/sec

02 PERMEABILITY OF BEDROCK (Check one)

☐ A. IMPERMEABLE
(Less than 10^{-6} cm/sec)
shale
☒ B. RELATIVELY IMPERMEABLE
(10^{-4} - 10^{-5} cm/sec)
☐ C. RELATIVELY PERMEABLE
(10^{-2} - 10^{-4} cm/sec)
☐ D. VERY PERMEABLE
(Greater than 10^{-2} cm/sec)

03 DEPTH TO BEDROCK

12-30 (ft)

04 DEPTH OF CONTAMINATED SOIL ZONE

Unknown (ft)

05 SOIL pH

Unknown

06 NET PRECIPITATION

4 (in)

07 ONE YEAR 24-HOUR RAINFALL

2.0 (in)

08 SLOPE

SITE SLOPE

0 - 100%

DIRECTION OF SITE SLOPE

North, South, and East

TERRAIN AVERAGE SLOPE

0-50 %

09 FLOOD POTENTIAL

10

SITE IS IN 100 YEAR FLOODPLAIN

☐ SITE IS ON BARRIER ISLAND, COASTAL HIGH HAZARD AREA, RIVERINE FLOODWAY

11 DISTANCE TO WETLANDS (5-acre minimum)

None.

ESTUARINE

OTHER

A. (mi)

B. (mi)

12 DISTANCE TO CRITICAL HABITAT (of endangered species)

11 (mi)

ENDANGERED SPECIES: Silver lamprey

13 LAND USE IN VICINITY

DISTANCE TO:

COMMERCIAL/INDUSTRIAL

RESIDENTIAL AREAS, NATIONAL/STATE PARKS
FORESTS, OR WILDLIFE RESERVES

AGRICULTURAL LANDS
PRIME AG LAND AG LAND

A. 0.50 (mi)

B. 0.01 (mi)

C. (mi) D. (mi)

14 DESCRIPTION OF SITE IN RELATION TO SURROUNDING TOPOGRAPHY

The landfill was originally a ravine that has been built up to the same elevation as Ford Road. The landfill is approximately 50 to 75 feet above the Black River. The landfill slopes steeply to the north, south, and east. The landfill is inactive.

VII. SOURCES OF INFORMATION (Cite specific references, e.g., state files, sample analysis, reports)

CERCLIS file, field sampling activities performed by PRC May 18, 1993, and analysis of samples collected by PRC



POTENTIAL HAZARDOUS WASTE SITE
SITE INSPECTION REPORT
PART 6 - SAMPLE AND FIELD INFORMATION

I. IDENTIFICATION

01 STATE OH 02 SITE NUMBER OHD 980 510 002

II. SAMPLES TAKEN

SAMPLE TYPE	01 NUMBER OF SAMPLES TAKEN	02 SAMPLES SENT TO	03 ESTIMATED DATE RESULTS AVAILABLE
GROUNDWATER	3	Organics Aquatec, Inc. Inorganics TMA/Skinner & Sherman labs, Inc.	
SURFACE WATER	2	Organics Aquatec, Inc. Inorganics TMA/Skinner & Sherman labs, Inc.	
WASTE			
AIR			
RUNOFF			
SPILL			
SOIL (sediment)	8	Organics Aquatec, Inc. Inorganics TMA/Skinner & Sherman labs, Inc.	
VEGETATION			
OTHER			

III. FIELD MEASUREMENTS TAKEN

01 TYPE	02 COMMENTS

IV. PHOTOGRAPHS AND MAPS

01 TYPE <input checked="" type="checkbox"/> GROUND <input checked="" type="checkbox"/> AERIAL	02 IN CUSTODY OF <u>PRC</u> <small>(Name of organization or individual)</small>
03 MAPS <input checked="" type="checkbox"/> YES <input type="checkbox"/> NO	04 LOCATION OF MAPS <u>PRC</u>

V. OTHER FIELD DATA COLLECTED (Provide narrative description)

The pH and the depth to groundwater were obtained for each monitoring well sample.

VI. SOURCES OF INFORMATION (Cite specific references, e.g., state files, sample analysis, reports)

CERCLIS file, field sampling activities performed by PRC May 18, 1993, and analysis of samples collected by PRC



POTENTIAL HAZARDOUS WASTE SITE
SITE INSPECTION REPORT
PART 7 - OWNER INFORMATION

I. IDENTIFICATION

01 STATE OH 02 SITE NUMBER OHD 980 510 002

II. CURRENT OWNER(S)					PARENT COMPANY (if applicable)				
01 NAME Lorain County Metro. Parks Department			02 D+B NUMBER		08 NAME			09 D+B NUMBER	
03 STREET ADDRESS (P.O. Box, RFD #, etc.) 12882 Diagonal Rd.			04 SIC CODE		10 STREET ADDRESS (P.O. Box, RFD #, etc.)			11 SIC CODE	
05 CITY LaGrange		06 STATE OH	07 ZIP CODE 44050		12 CITY		13 STATE	14 ZIP CODE	
01 NAME			02 D+B NUMBER		08 NAME			09 D+B NUMBER	
03 STREET ADDRESS (P.O. Box, RFD #, etc.)			04 SIC CODE		10 STREET ADDRESS (P.O. Box, RFD #, etc.)			11 SIC CODE	
05 CITY		06 STATE	07 ZIP CODE		12 CITY		13 STATE	14 ZIP CODE	
01 NAME			02 D+B NUMBER		08 NAME			09 D+B NUMBER	
03 STREET ADDRESS (P.O. Box, RFD #, etc.)			04 SIC CODE		10 STREET ADDRESS (P.O. Box, RFD #, etc.)			11 SIC CODE	
05 CITY		06 STATE	07 ZIP CODE		12 CITY		13 STATE	14 ZIP CODE	
01 NAME			02 D+B NUMBER		08 NAME			09 D+B NUMBER	
03 STREET ADDRESS (P.O. Box, RFD #, etc.)			04 SIC CODE		10 STREET ADDRESS (P.O. Box, RFD #, etc.)			11 SIC CODE	
05 CITY		06 STATE	07 ZIP CODE		12 CITY		13 STATE	14 ZIP CODE	
III. PREVIOUS OWNER(S) (List most recent first)					IV. REALTY OWNER(S) (if applicable; list most recent first)				
01 NAME Browning-Ferris Industries			02 D+B NUMBER		08 NAME			09 D+B NUMBER	
03 STREET ADDRESS (P.O. Box, RFD #, etc.) 43502 Rt. 20 East (Lorain County Landfill)			04 SIC CODE		10 STREET ADDRESS (P.O. Box, RFD #, etc.)			11 SIC CODE	
05 CITY Oberlin		06 STATE OH	07 ZIP CODE 44074		12 CITY		13 STATE	14 ZIP CODE	
01 NAME Brotherton Disposal, Inc.			02 D+B NUMBER		08 NAME			09 D+B NUMBER	
03 STREET ADDRESS (P.O. Box, RFD #, etc.) 110 Malcolm Court			04 SIC CODE		10 STREET ADDRESS (P.O. Box, RFD #, etc.)			11 SIC CODE	
05 CITY Elyria		06 STATE OH	07 ZIP CODE 44035		12 CITY		13 STATE	14 ZIP CODE	
01 NAME			02 D+B NUMBER		08 NAME			09 D+B NUMBER	
03 STREET ADDRESS (P.O. Box, RFD #, etc.)			04 SIC CODE		10 STREET ADDRESS (P.O. Box, RFD #, etc.)			11 SIC CODE	
05 CITY		06 STATE	07 ZIP CODE		12 CITY		13 STATE	14 ZIP CODE	
V. SOURCES OF INFORMATION (Cite specific references, e.g., state files, sample analysis, reports)									
CERCLIS file, field sampling activities performed by PRC May 18, 1993, and analysis of samples collected by PRC									



POTENTIAL HAZARDOUS WASTE SITE
SITE INSPECTION REPORT
PART 8 - OPERATOR INFORMATION

I. IDENTIFICATION

01 STATE OH	02 SITE NUMBER OHD 980 510 002
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II. CURRENT OPERATOR <i>(Provide if different from owner)</i>				OPERATOR'S PARENT COMPANY <i>(if applicable)</i>			
01 NAME Browning-Ferris Industries		02 D + B NUMBER		10 NAME		11 D + B NUMBER	
03 STREET ADDRESS <i>(P.O. Box, RFD #, etc.)</i>		04 SIC CODE		12 STREET ADDRESS <i>(P.O. Box, RFD #, etc.)</i>		13 SIC CODE	
05 CITY		06 STATE	07 ZIP CODE	14 CITY		15 STATE	16 ZIP CODE
08 YEARS OF OPERATION Unknown		09 NAME OF OWNER					
III. PREVIOUS OPERATOR(S) <i>(List most recent first; provide only if different from owner)</i>				PREVIOUS OPERATOR'S PARENT COMPANY <i>(if applicable)</i>			
01 NAME Browning-Ferris Industries		02 D + B NUMBER		10 NAME		11 D + B NUMBER	
03 STREET ADDRESS <i>(P.O. Box, RFD #, etc.)</i> 8515 Butternut Ridge		04 SIC CODE		12 STREET ADDRESS <i>(P.O. Box, RFD #, etc.)</i>		13 SIC CODE	
05 CITY Elyria		06 STATE OH	07 ZIP CODE	14 CITY		15 STATE	16 ZIP CODE
08 YEARS OF OPERATION		09 NAME OF OWNER DURING THIS PERIOD 1965 - 1974					
01 NAME Brotherton Disposal Inc.		02 D + B NUMBER		10 NAME		11 D + B NUMBER	
03 STREET ADDRESS <i>(P.O. Box, RFD #, etc.)</i>		04 SIC CODE		12 STREET ADDRESS <i>(P.O. Box, RFD #, etc.)</i>		13 SIC CODE	
05 CITY		06 STATE	07 ZIP CODE	14 CITY		15 STATE	16 ZIP CODE
08 YEARS OF OPERATION 1963 - ?		09 NAME OF OWNER DURING THIS PERIOD					
01 NAME Unknown		02 D + B NUMBER		10 NAME		11 D + B NUMBER	
03 STREET ADDRESS <i>(P.O. Box, RFD #, etc.)</i>		04 SIC CODE		12 STREET ADDRESS <i>(P.O. Box, RFD #, etc.)</i>		13 SIC CODE	
05 CITY		06 STATE	07 ZIP CODE	14 CITY		15 STATE	16 ZIP CODE
08 YEARS OF OPERATION		09 NAME OF OWNER DURING THIS PERIOD					

V. SOURCES OF INFORMATION *(Cite specific references, e.g., state files, sample analysis, reports)*



POTENTIAL HAZARDOUS WASTE SITE
SITE INSPECTION REPORT
PART 9 - GENERATOR/TRANSPORTER INFORMATION

I. IDENTIFICATION

01 STATE OH	02 SITE NUMBER OHD 980 510 002
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II. ON-SITE GENERATOR

01 NAME		02 D+B NUMBER	
03 STREET ADDRESS (P.O. Box, RFD #, etc.)		04 SIC CODE	
05 CITY	06 STATE	07 ZIP CODE	

III. OFF-SITE GENERATOR(S)

01 NAME Harshaw Chemicals		02 D+B NUMBER		01 NAME Elyria General Motors		02 D+B NUMBER	
03 STREET ADDRESS (P.O. Box, RFD #, etc.) 113 John Street		04 SIC CODE		03 STREET ADDRESS (P.O. Box, RFD #, etc.)		04 SIC CODE	
05 CITY Elyria	06 STATE OH	07 ZIP CODE 44035		05 CITY	06 STATE	07 ZIP CODE	
01 NAME BF Goodrich Co.		02 D+B NUMBER		01 NAME		02 D+B NUMBER	
03 STREET ADDRESS (P.O. Box, RFD #, etc.) PO Box 134 - Moore and Walker Roads		04 SIC CODE		03 STREET ADDRESS (P.O. Box, RFD #, etc.)		04 SIC CODE	
05 CITY Avon Lake	06 STATE OH	07 ZIP CODE 44012		05 CITY	06 STATE	07 ZIP CODE	

IV. TRANSPORTER(S)

01 NAME		02 D+B NUMBER		01 NAME		02 D+B NUMBER	
03 STREET ADDRESS (P.O. Box, RFD #, etc.)		04 SIC CODE		03 STREET ADDRESS (P.O. Box, RFD #, etc.)		04 SIC CODE	
05 CITY	06 STATE	07 ZIP CODE		05 CITY	06 STATE	07 ZIP CODE	
01 NAME		02 D+B NUMBER		01 NAME		02 D+B NUMBER	
03 STREET ADDRESS (P.O. Box, RFD #, etc.)		04 SIC CODE		03 STREET ADDRESS (P.O. Box, RFD #, etc.)		04 SIC CODE	
05 CITY	06 STATE	07 ZIP CODE		05 CITY	06 STATE	07 ZIP CODE	

V. SOURCES OF INFORMATION (Cite specific references, e.g., state files, sample analysis, reports)

CERCLIS file, field sampling activities performed by PRC May 18, 1993, and analysis of samples collected by PRC



POTENTIAL HAZARDOUS WASTE SITE
SITE INSPECTION REPORT
PART 10 - PAST RESPONSE ACTIVITIES

I. IDENTIFICATION

01 STATE
OH

02 SITE NUMBER
OHD 980 510 002

II. PAST RESPONSE ACTIVITIES

01 ☐ A. WATER SUPPLY CLOSED
04 DESCRIPTION

02 DATE _____

03 AGENCY _____

N/A

01 ☐ B. TEMPORARY WATER SUPPLY PROVIDED
04 DESCRIPTION

02 DATE _____

03 AGENCY _____

N/A

01 ☐ C. PERMANENT WATER SUPPLY PROVIDED
04 DESCRIPTION

02 DATE _____

03 AGENCY _____

N/A

01 ☐ D. SPILLED MATERIAL REMOVED
04 DESCRIPTION

02 DATE _____

03 AGENCY _____

N/A

01 ☐ E. CONTAMINATED SOIL REMOVED
04 DESCRIPTION

02 DATE _____

03 AGENCY _____

N/A

01 ☐ F. WASTE REPACKAGED
04 DESCRIPTION

02 DATE _____

03 AGENCY _____

N/A

01 ☐ G. WASTE DISPOSED ELSEWHERE
04 DESCRIPTION

02 DATE _____

03 AGENCY _____

N/A

01 ☐ H. ON SITE BURIAL
04 DESCRIPTION

02 DATE _____

03 AGENCY _____

N/A

01 ☐ I. IN SITU CHEMICAL TREATMENT
04 DESCRIPTION

02 DATE _____

03 AGENCY _____

N/A

01 ☐ J. IN SITU BIOLOGICAL TREATMENT
04 DESCRIPTION

02 DATE _____

03 AGENCY _____

N/A

01 ☐ K. IN SITU PHYSICAL TREATMENT
04 DESCRIPTION

02 DATE _____

03 AGENCY _____

N/A

01 ☐ L. ENCAPSULATION
04 DESCRIPTION

02 DATE _____

03 AGENCY _____

N/A

01 ☐ M. EMERGENCY WASTE TREATMENT
04 DESCRIPTION

02 DATE _____

03 AGENCY _____

N/A

01 ☐ N. CUTOFF WALLS
04 DESCRIPTION

02 DATE _____

03 AGENCY _____

N/A

01 ☐ O. EMERGENCY DIKING/SURFACE WATER DIVERSION
04 DESCRIPTION

02 DATE _____

03 AGENCY _____

N/A

01 ☐ P. CUTOFF TRENCHES/SUMP
04 DESCRIPTION

02 DATE _____

03 AGENCY _____

N/A

01 ☐ Q. SUBSURFACE CUTOFF WALL
04 DESCRIPTION

02 DATE _____

03 AGENCY _____

N/A



POTENTIAL HAZARDOUS WASTE SITE
SITE INSPECTION REPORT
PART 10 - PAST RESPONSE ACTIVITIES

I. IDENTIFICATION

01 STATE
OH

02 SITE NUMBER
OHD 980 510 002

II. PAST RESPONSE ACTIVITIES *(Continued)*

01 ☐ R. BARRIER WALLS CONSTRUCTED
04 DESCRIPTION

02 DATE _____

03 AGENCY _____

N/A

01 ☐ S. CAPPING/COVERING
04 DESCRIPTION

02 DATE _____

03 AGENCY _____

Landfill covered with 5 to 8 feet of cover material by BFI.

01 ☐ T. BULK TANKAGE REPAIRED
04 DESCRIPTION

02 DATE _____

03 AGENCY _____

N/A

01 ☐ U. GROUT CURTAIN CONSTRUCTED
04 DESCRIPTION

02 DATE _____

03 AGENCY _____

N/A

01 ☐ V. BOTTOM SEALED
04 DESCRIPTION

02 DATE _____

03 AGENCY _____

N/A

01 ☐ W. GAS CONTROL
04 DESCRIPTION

02 DATE _____

03 AGENCY _____

N/A

01 ☐ X. FIRE CONTROL
04 DESCRIPTION

02 DATE _____

03 AGENCY _____

N/A

01 ☐ Y. LEACHATE TREATMENT
04 DESCRIPTION

02 DATE _____

03 AGENCY _____

N/A

01 ☐ Z. AREA EVACUATED
04 DESCRIPTION

02 DATE _____

03 AGENCY _____

N/A

01 ☐ 1. ACCESS TO SITE RESTRICTED
04 DESCRIPTION

02 DATE _____

03 AGENCY _____

N/A

01 ☐ 2. POPULATION RELOCATED
04 DESCRIPTION

02 DATE _____

03 AGENCY _____

N/A

01 ☐ 3. OTHER REMEDIAL ACTIVITIES
04 DESCRIPTION

02 DATE _____

03 AGENCY _____

None have been identified.

III. SOURCES OF INFORMATION *(Cite specific references, e.g., state files, sample analysis, reports)*

CERCLIS file, field sampling activities performed by PRC May 18, 1993, and analysis of samples collected by PRC



POTENTIAL HAZARDOUS WASTE SITE
SITE INSPECTION REPORT
PART 11 - ENFORCEMENT INFORMATION

I. IDENTIFICATION

01 STATE OH	02 SITE NUMBER OHD 980 510 002
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II. ENFORCEMENT INFORMATION

01 PAST REGULATORY ENFORCEMENT ACTION ☐ YES ☒ NO

02 DESCRIPTION OF FEDERAL, STATE, LOCAL REGULATORY/ENFORCEMENT ACTION

III. SOURCES OF INFORMATION (Cite specific references, e.g., state files, sample analysis, reports)

APPENDIX B
PHOTOGRAPHIC LOG
(18 pages)

SDMS US EPA REGION V

COLOR - RESOLUTION - 3

IMAGERY INSERT FORM

Multiple pages of this document include color or resolution variations and may be illegible in SDMS due to bad source documents. Unless otherwise noted, these pages are available in monochrome. (The source document page(s) are more legible than the images.) The original document is available for viewing at the Superfund Records Center.

SITE NAME	FORD ROAD INDUSTRIAL LANDFILL
DOC ID #	148517
DOCUMENT VARIATION	<u>X</u> COLOR OR ___ RESOLUTION
PRP	
PHASE	SAS
OPERABLE UNITS	
LOCATION	Box # <u>1</u> Folder # <u>2</u> Subsection <u> </u>
PHASE (AR DOCUMENTS ONLY)	___ Remedial ___ Removal ___ Deletion Docket ___ Original ___ Update # ___ Volume ___ of ___
COMMENT(S) COLOR PHOTOGRAPHS ARE INCLUDED IN THIS FOLDER	



Photograph No.: 1

Date: 03/08/93

Orientation: Southwest

Description: Picture taken at the southwest corner of the landfill. A man-made tributary, which feeds the Black River, is visible.



Photograph No.: 2

Date: 03/08/93

Orientation: East

Description: Picture taken looking down cliff to the Black River. In the center of the picture a monitoring well is visible.



Photograph No.: 3

Date: 03/08/93

Orientation: Southwest

Description: Picture taken from the northeast corner of the landfill looking southwest towards the entrance. Piles of dirt from local construction activities are visible.



Photograph No : 4

Date: 03/08/93

Orientation: North

Description: Picture taken from the northeast corner of the landfill looking north. Riprap covering the underground sewer main is visible. A leachate seep entering the Black River and a monitoring well are located in the center of picture



A-3

Photograph No.: 5, 6, and 7

Date: 03/08/93

Orientation: East south

Description: Panoramic view from northwest corner of the landfill looking east, then south along Ford Road. Piles of dirt from local construction activities are visible.

ENFORCEMENT CONFIDENTIAL



Photograph No.: 8

Date: 03/08/93

Orientation: East

Description: Picture taken from Ford Road looking east down riprap. Directly across the Black River the sewage pumping station is visible. The northeast corner of the landfill is visible in the extreme right side of the picture.



Photograph No.: 9

Date: 03/08/93

Orientation: East

Description: Picture taken from Ford Road, at top of riprap, looking at the northeast corner of the landfill.



Photograph No.: 10

Date: 03/08/93

Orientation: East

Description: Picture taken from Ford Road looking at entrance to the Ford Road Landfill.



Photograph No. 1

Location: Southeast corner of the landfill

Orientation: Southwest

Date: 03/08/93

Description: Graded access road along southern boundary of landfill.



Photograph No. 2

Location: East-central edge of site

Orientation: East

Date: 03/08/93

Description: View of flooding Black River and monitoring well (MW-2).



Photograph No. 3

Location: Northeast corner of the landfill

Orientation: Southwest

Date: 03/08/93

Description: Piles of clean fill from local construction activities, used for cover.



Photograph No. 4

Location: Northeast corner of the landfill

Orientation: North

Date: 03/08/93

Description: Riprap covering the underground sewer main is visible. MW-1 and a leachate seep entering the Black River and MW-1 are located in the center of the picture



Photograph No. 5

Location: North border of landfill

Orientation East

Date: 03/08/93

Description: Chain barrier along Ford Road. Intermittent stream is to the left in the trees.



Photograph No. 6 and 7

Location: Ford Road

Orientation: East and south

Date: 03/08/93

Description: Panoramic view from the northwest corner of the landfill looking east, then south along Ford Road. Piles of clean fill on left are used as cover



Photograph No. 10
 Orientation East
 Description Entrance to the Ford Road Landfill.

Location: Ford Road
 Date: 03/08/93



Photograph No. 11
 Orientation North
 Description Landfill surface.

Location: Southeast corner
 Date: 05/18/93



Photograph No. 12
 Orientation Northwest
 Description Landfill surface.

Location: Southeast corner
 Date: 05/18/93



Photograph No. 13
 Orientation West
 Description Landfill surface.

Location: Southeast corner
 Date: 05/18/93



Photograph No. 14

Location: Eastern edge of landfill

Orientation: North

Date: 05/18/93

Description: Landfill surface and slope of landfill, with the Black River to the east.



Photograph No. 15

Location: Eastern edge of landfill

Orientation: East

Date: 05/18/93

Description: Landfill slope down to the Black River. MW-2 is between the vehicle and the landfill. The island is visible in the background.



Photograph No. 16
 Orientation: East
 Description: Black River with sewage treatment plant in background.

Location: Black River
 Date: 05/18/93



Photograph No. 17
 Orientation: West
 Description: Wetland area at the foot of the southern edge of the landfill.

Location: Southern boundary of landfill
 Date: 05/18/93



Photograph No. 18

Location: Monitoring well no. 1

Orientation: North

Date: 05/18/93

Description: Location of MW-1, with drainage pipe and Black River in the background.



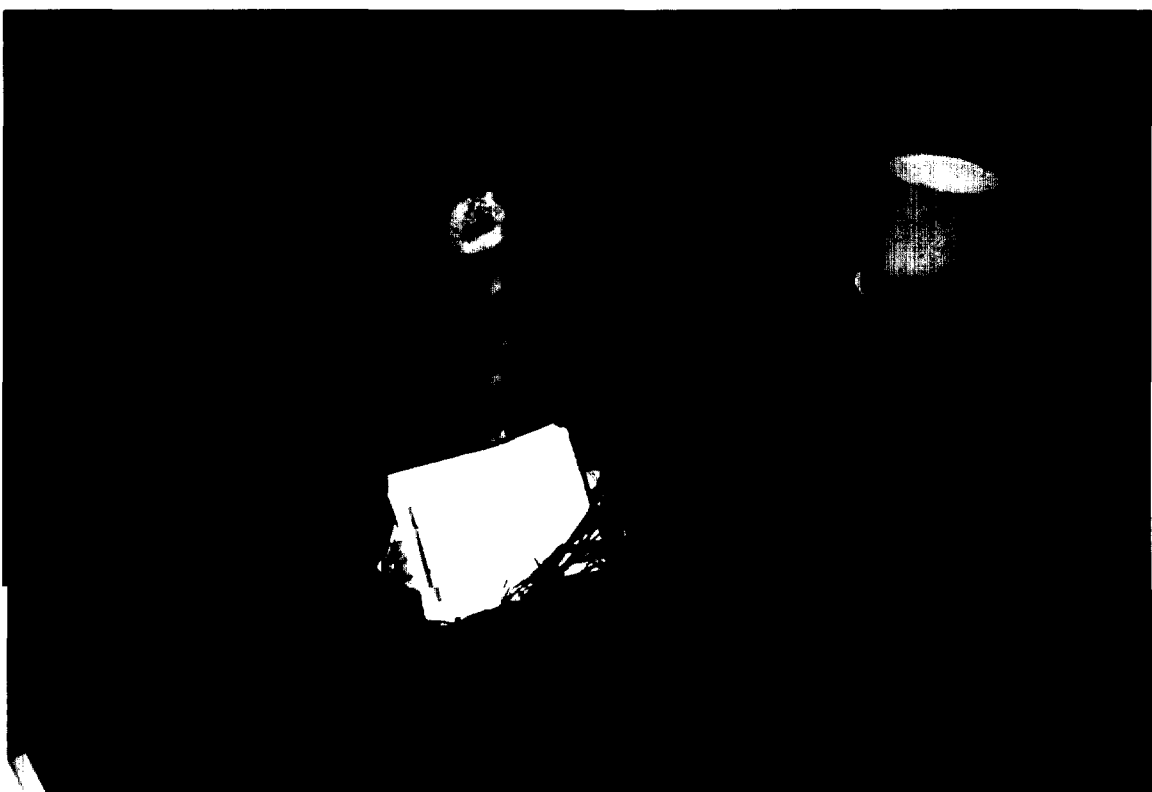
Photograph No. 19

Location: Monitoring well no. 1

Orientation: West

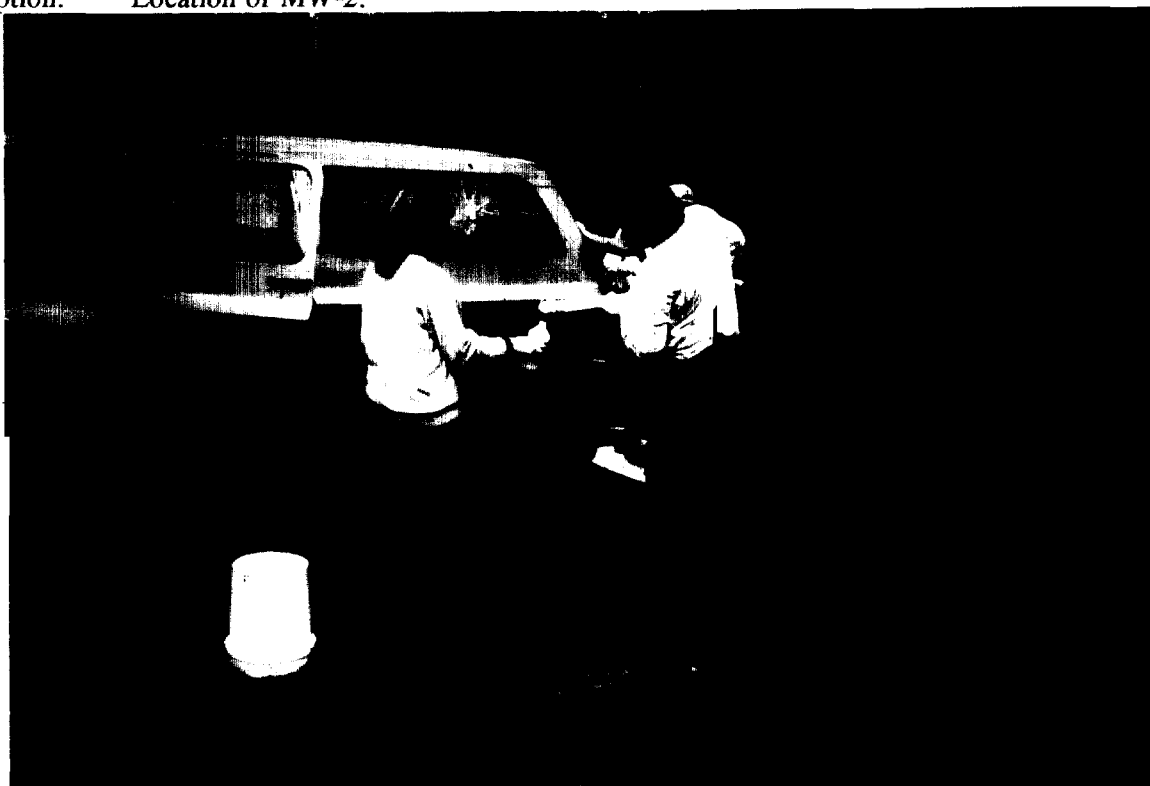
Date: 05/18/93

Description: MW-1, with drainage pipe and landfill slope in the background.



Photograph No. 20
 Orientation: West
 Description: Location of MW-2.

Location: Monitoring well no. 2
 Date: 05/18/93



Photograph No. 21
 Orientation: East
 Description: Sampling of MW-02.

Location: Monitoring well no. 2
 Date: 05/18/93

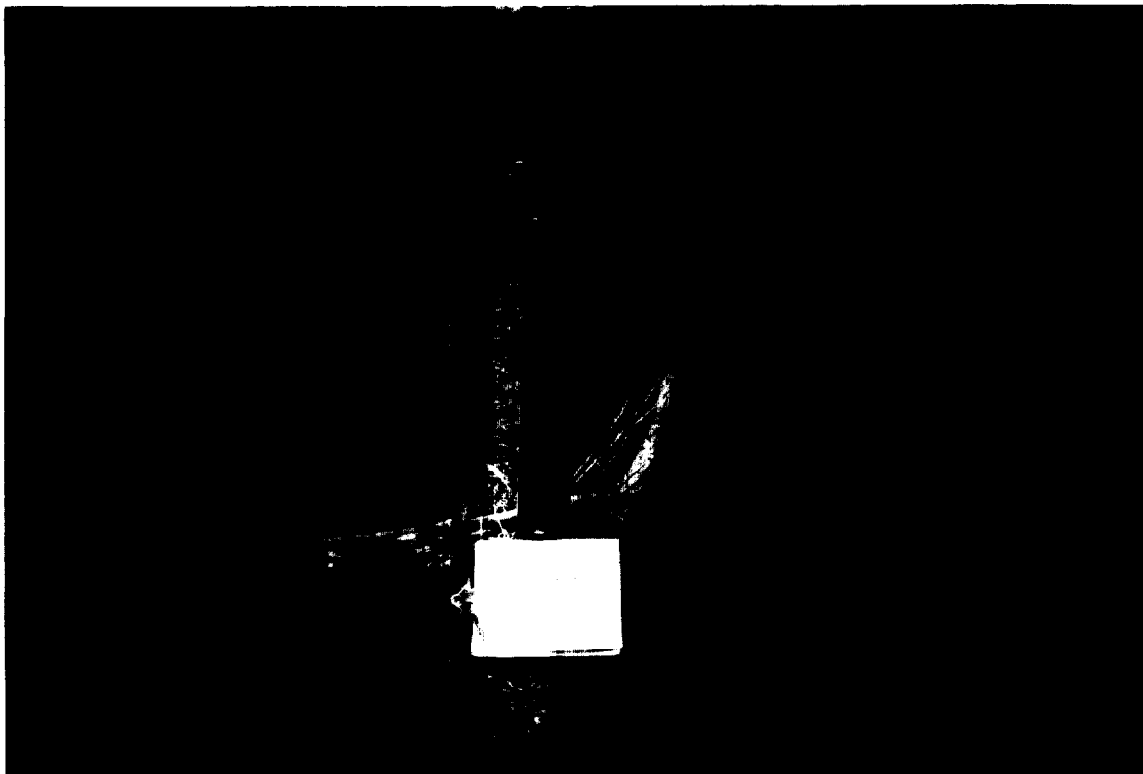


Photograph No. 22

Orientation: West

Description: Sampling of MW-02. Note turbidity of water.

Location: Monitoring well no. 2
Date: 05/18/93



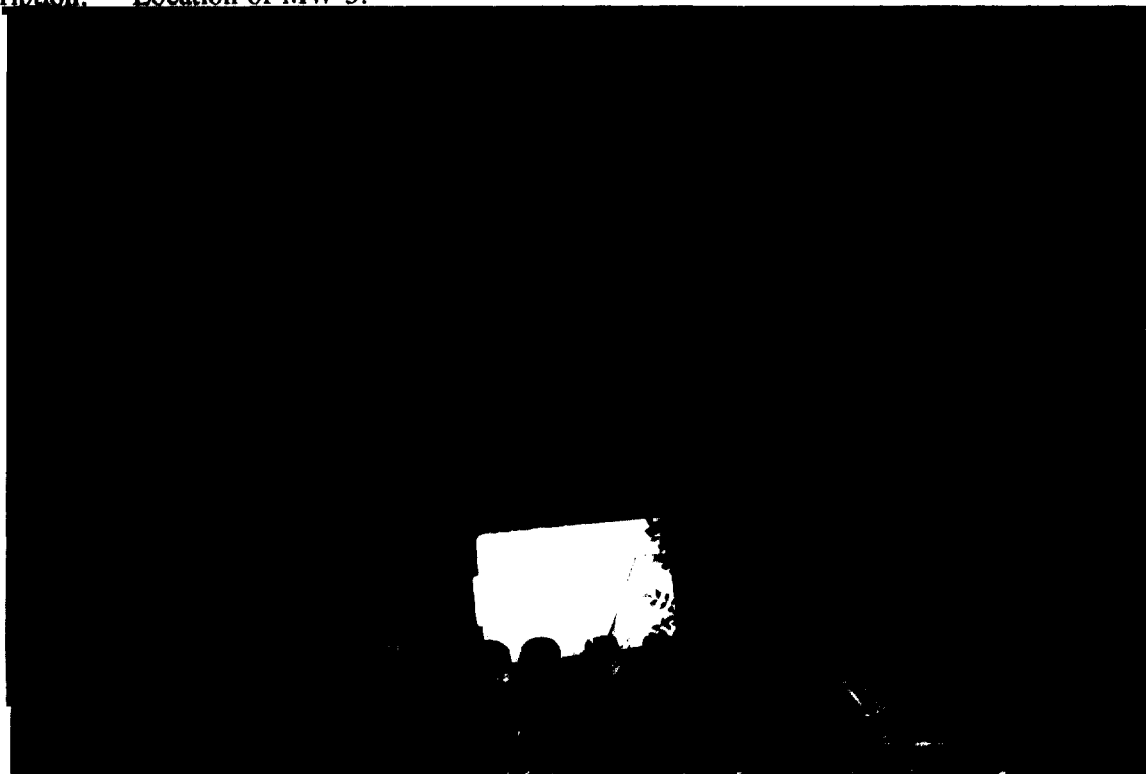
Photograph No. 23

Location: Monitoring well no. 3

Orientation: West

Date: 05/18/93

Description: Location of MW-3.



Photograph No. 24

Location: Intermittent stream north of landfill

Orientation: South

Date: 05/18/93

Description: Location of soil sample SD-01.



Photograph No. 25

Location: Black River

Orientation: East

Date: 05/18/93

Description: Location of samples SD-02, SW-02, and SW-2D.



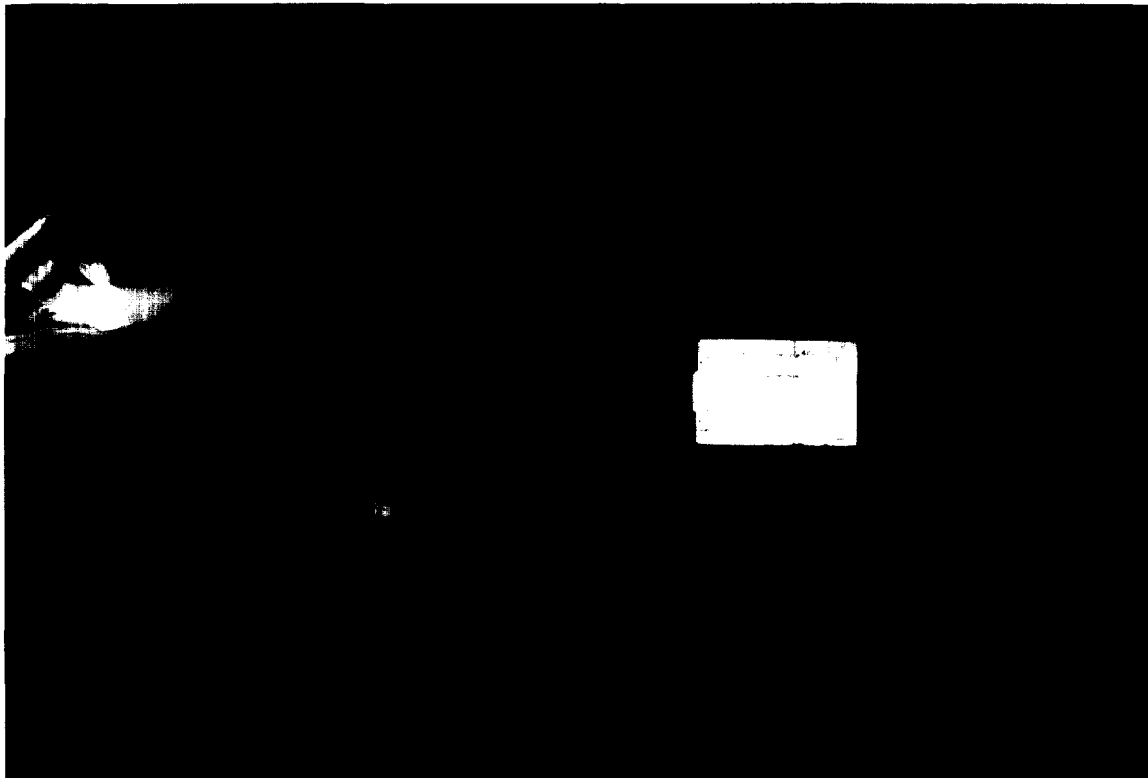
Photograph No. 26

Location: Black River

Orientation: East

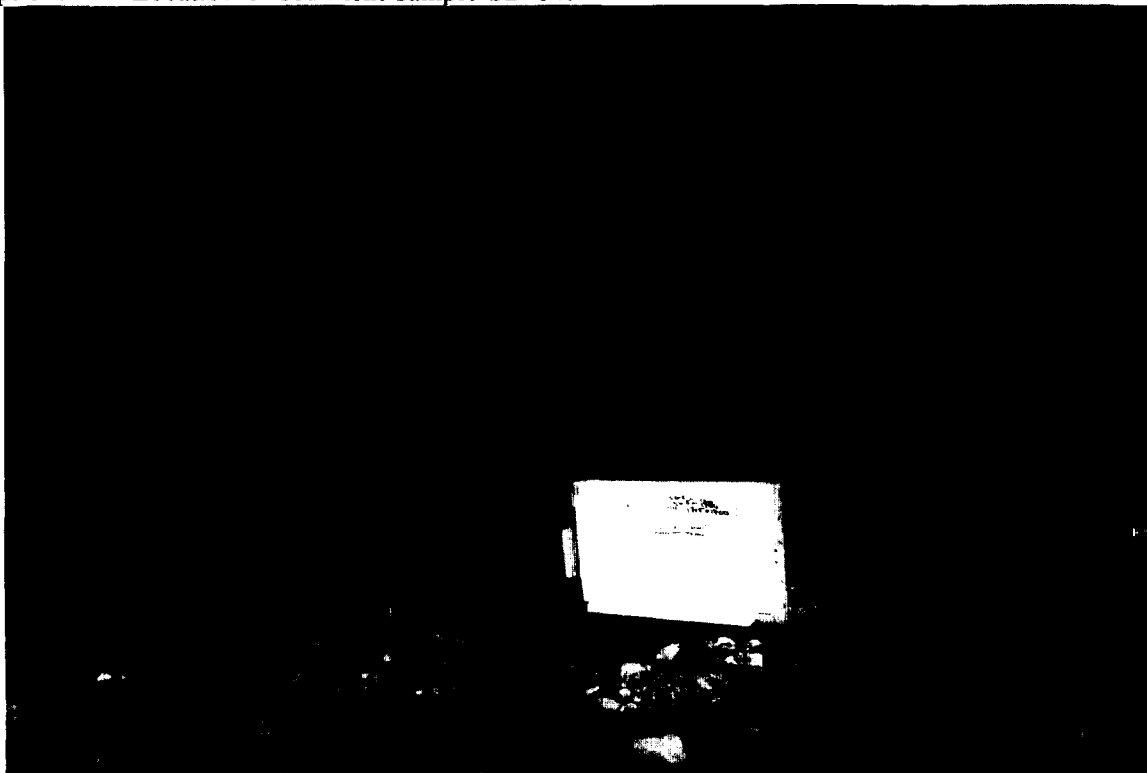
Date: 05/18/93

Description: Location of sediment sample SD-03.



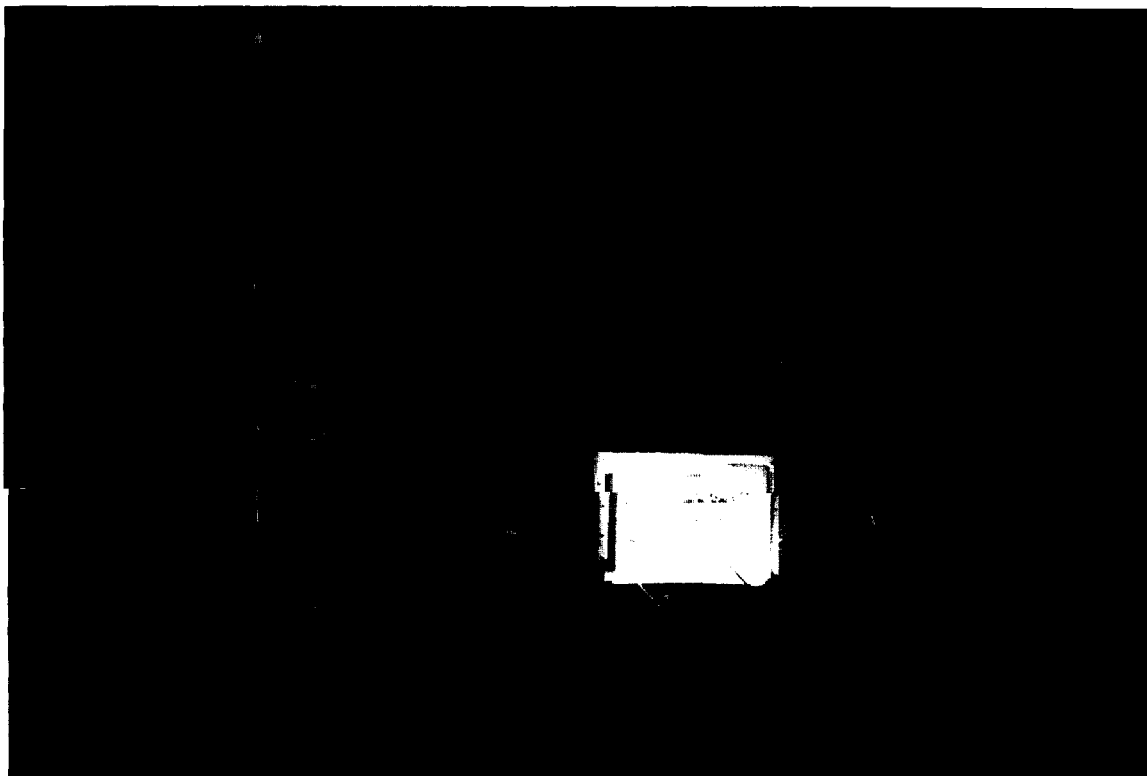
Photograph No. 27
 Orientation: East
 Description: Location of sediment sample SD-04.

Location: Black River
 Date: 05/18/93



Photograph No. 28
 Orientation: South
 Description: Locations of sediment sample SD-05 and surface water sample SW-05.

Location: Black River
 Date: 05/18/93



Photograph No. 29
 Orientation: West
 Description: Location of sediment sample SD-06.

Location: Wetlands
 Date: 05/18/93



Photograph No. 30
 Orientation: West
 Description: Location of soil sample SD-07.

Location: 50 feet west of landfill off Ford Road
 Date: 05/18/93



Photograph No. 31

Location: Leachate seep discharge point

Orientation: North

Date: 05/18/93

Description: Location of sediment sample SD-08. Orange sediment is visible in the foreground.



Photograph No. 32

Location: Black River

Orientation: South

Date: 05/18/93

Description: Bank of the Black River near SD-08. Note orange-stained sediments at the base of the photo.

NPL Characteristics Data Collection Form

Page 1 of 7

Instructions:

The NPL Characteristics Data Collection Form is designed to standardize hazardous waste site information for input into a database. The HRS package is the primary source of information for this form; however, if no hard data are available for a question, estimates based on professional judgment and other sources of information are acceptable. As you complete the form, please keep the following in mind:

1. Complete the form in dark pencil.
2. Use the most accurate level of information available (e.g., SI level information over PA).
3. If the designated response fields for a question are not adequate to accurately describe the site, use the "other" response with a brief explanation.

Record Information:

1. Site Reviewer: Catherine Cooney
2. Date: October 11, 1993
3. Site Name (as entered in CERCLIS): Ford Road Landfill
4. Site Location (city/county, state): Elyria/Lorain County, Ohio
5. Site CERCLIS Number: OHD 980 510 002

NPL Characteristics Data Collection Form

Site Name: Ford Road Landfill
CERCLIS Number: OHD 980 510 002
Page 2 of 7

Site Description

1. Coordinates (fill in or check unknown; if tenths of a second accuracy is not available, enter 0 as a default value in the appropriate space; as this information is necessary for interaction with other databases, check unknown only if no information is available).

41° 22' 30.0 " 82 °00 '0.0 " ☐ Unknown
N. Latitude W. Longitude

2. Setting (relative to local area's population density/distribution; check 1):

☐ Urban; central city areas ☐ Rural, outside of suburban areas
☒ Suburban: bordering urban areas ☐ Unknown

3. Predominant Land Use Within 1 Mile of Site (check all applicable uses):

☐ Industrial Area ☐ Agricultural ☒ Park
☒ Residential ☐ Military ☐ Unknown
☐ Forest/Fields ☐ Department of Energy ☐ Other (fill in) _____
☒ Commercial Area ☐ Mining

4. Current Owner (or operator if no distinction is made; check 1):

☐ Private - Industrial/Commercial ☐ State ☐ Multiple Owners/Different Categories
☐ Private - Individual (residential) ☐ Federal ☐ Unknown
☐ Municipal ☐ Indian Lands ☐ Other (fill in) _____
☒ County ☐ Ownership Not Applicable
(ground water plume, sediment contamination)

5. Owner When Contaminated (or operator if no distinction is made; check 1):

☐ Private - Industrial/Commercial ☐ State ☒ Multiple Owners/Different Categories
☐ Private - Individual (residential) ☐ Federal ☐ Unknown
☐ Municipal ☐ Indian Lands ☐ Other (fill in) _____
☐ County ☐ Ownership Not Applicable
(ground water plume, sediment contamination)

6. Site Area (fill in area and check units or check unknown):

15 ☒ Acres ☐ Square feet ☐ Unknown

7. Current Site Status (check 1):

☐ Active: legal or illegal waste treatment, storage or disposal activities currently occur onsite.
☒ Inactive: no waste treatment, storage or disposal activities currently occur onsite.
☐ Site with Unknown Source (ground water contamination plume, sediment contamination).

8. Years of Operation (fill in or check unknown):

☐ Waste activity a one-time event (spill), record years of operation and note spill in comments section:
(beginning year) _____ to (ending year) _____
☐ Active site: (beginning year) _____ to (date of site evaluation) _____
☒ Inactive site: (beginning year) ≈ 1950 to (ending year) 1974
☐ Unknown (only if no historical information is available)

NPL Characteristics Data Collection Form

Site Name: Ford Road Landfill
CERCLIS Number: OHD 980 510 002
Page 3 of 7

Site Description (cont.)

9. Entity Responsible for Waste Generation (not the entity that generated the original product; check all that apply; check unknown only if no information is available.

- | | |
|---|--|
| <input checked="" type="checkbox"/> Manufacturing (if checked, must check a subitem) <ul style="list-style-type: none"><input type="checkbox"/> Lumber and Wood Products<input type="checkbox"/> Inorganic Chemicals<input type="checkbox"/> Plastic and Rubber Products<input checked="" type="checkbox"/> Paints, Varnishes<input type="checkbox"/> Industrial Organic Chemicals<input checked="" type="checkbox"/> Agricultural Chemicals (pesticides, fertilizers)<input checked="" type="checkbox"/> Miscellaneous Chemical Products (such as adhesives, explosives, ink)<input type="checkbox"/> Primary Metal Industries<input checked="" type="checkbox"/> Metal Coating, Engraving and Allied Services<input checked="" type="checkbox"/> Metal Forging and Stamping<input type="checkbox"/> Fabricated Structural Metal Products<input type="checkbox"/> Electronic Equipment<input type="checkbox"/> Other Manufacturing | <input type="checkbox"/> Mining (if checked, must check a subitem) <ul style="list-style-type: none"><input type="checkbox"/> Metals<input type="checkbox"/> Coal<input type="checkbox"/> Oil and Gas<input type="checkbox"/> Non-metallic Minerals |
| <input type="checkbox"/> Recyclers | <input type="checkbox"/> Municipal Landfill (waste generator unknown) |
| | <input type="checkbox"/> Military |
| | <input type="checkbox"/> Department of Energy |
| | <input type="checkbox"/> Federal Facility |
| | <input type="checkbox"/> Unknown |
| | <input checked="" type="checkbox"/> Other (fill in) <u>construction paper/printing lab/hospital</u> |

10. Site Activities/Waste Deposition (check all that apply; check unknown only if no information is available):

- | | |
|---|--|
| <input checked="" type="checkbox"/> Surface Impoundment (primarily liquid) | <input type="checkbox"/> Tanks - Below Ground |
| <input type="checkbox"/> Waste Piles (primarily solid, covered or uncovered) | <input checked="" type="checkbox"/> Discharge to Sewer/Surface Water (intentional permitted or illegal discharge; <u>not</u> secondary runoff) |
| <input type="checkbox"/> Municipal Landfill | <input type="checkbox"/> Recycling |
| <input checked="" type="checkbox"/> Industrial Landfill | <input type="checkbox"/> Airborne Release/Incineration (including incinerators, boilers, fire and burn pits, any fire incidents) |
| <input type="checkbox"/> Drum/Container Storage (intentional storage in specified areas) | <input type="checkbox"/> Spill (accidental, 1 time only, <u>not</u> leaking drums or tanks) |
| <input type="checkbox"/> Illegal Dumping (unpermitted dumping by site owner/operator in undesignated disposal area) | <input type="checkbox"/> Unknown |
| <input type="checkbox"/> Unauthorized Dumping by Third Party | <input type="checkbox"/> Other (fill in) _____ |
| <input type="checkbox"/> Tanks - Above Ground (check if tank type unknown) | |

11. How Initially Identified (check 1):

- | | |
|---|--|
| <input type="checkbox"/> Citizen Complaint (including PA petition, anonymous) | <input type="checkbox"/> Other Federal Program |
| <input checked="" type="checkbox"/> CERCLA Notification | <input type="checkbox"/> Incidental |
| <input type="checkbox"/> State/Local Program | <input type="checkbox"/> Unknown |
| <input type="checkbox"/> RCRA Notification | <input type="checkbox"/> Other (fill in) _____ |

12. Material Authorized to be Deposited Onsite By (check 1):

- | | |
|--|--|
| <input type="checkbox"/> Present Owner | <input checked="" type="checkbox"/> Present and Former Owner |
| <input type="checkbox"/> Former Owner | <input type="checkbox"/> Unauthorized Dumping |

13. Wastes Generated By (check 1):

- | | |
|--|---|
| <input type="checkbox"/> Onsite Generator (include recyclers) | <input type="checkbox"/> Onsite and Offsite Generator |
| <input checked="" type="checkbox"/> Offsite Generator (include ground water plume, sediment contamination) | <input type="checkbox"/> Unknown |

NPL Characteristics Data Collection Form

Site Name: Ford Road Landfill
CERCLIS Number: OHD 980 510 002
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Site Description (cont.)

14. Waste Accessible to the Public (check 1):

☐ Yes ☐ No ☐ Unknown ☒ Other (fill in) leachate seeps

15. Miscellaneous Descriptive Information (check all that apply):

☐ Consists of Multiple Units ☐ Emergency Removal Has Occurred ☐ Ground Water Plume
☐ Units Owned by Multiple Entities ☐ Other Removal Action Has Occurred ☒ Sediment Contamination
☐ Consent Order ☐ Other Emergency Action Has Occurred ☐ No Miscellaneous Descriptive Information Applies

Waste Description

16. Physical State of Wastes (check all that apply):

☒ Solid ☐ Liquid ☐ Sludge ☐ Gas

17. Wastes Deposited or Detected Onsite (check all that apply):

☒ Organic Chemicals ☐ Radioactive Waste
☒ Inorganic Chemicals ☒ Oily Wastes
☒ Solvents ☐ POTW Sludge
☒ Laboratory/Hospital Wastes ☐ Municipal Wastes
☐ Acids/Bases ☒ Construction/Demolition Wastes
☒ Paints/Pigments ☒ Lead
☐ Explosives ☐ Asbestos
☒ Pesticides/Herbicides ☒ PCBs
☒ Metals ☐ Creosote
☒ Fly and Bottom Ash ☐ PCP
☐ Mining Wastes ☐ Dioxins
☐ Smelting Wastes ☐ Other (fill in) _____

Demographic Information

18. Workers Present Onsite (check 1):

☒ Yes ☐ No ☐ Unknown

19. Distance to Nearest Non-Worker Individual (check 1):

☐ Onsite ☐ > 1/4 - 1/2 Mile ☐ > 1 Mile
☒ > 10 Feet - 1/4 Mile ☐ > 1/2 - 1 Mile ☐ Unknown

20. Residential Population Within 1 Mile (check yes and fill in number, or check no or unknown):

≈ 2,500 ☒ Yes ☐ No ☐ Unknown

21. Residential Population Within 4 Miles (check yes and fill in number, or check no or unknown):

≈ 95,000 ☒ Yes ☐ No ☐ Unknown

NPL Characteristics Data Collection Form

Site Name: Ford Road Landfill
CERCLIS Number: OHD 980 510 002
Page 5 of 7

Water Use Information

22. Local Drinking Water Supply Source (check all that apply):

- ☐ Ground Water (within 4 mile distance limit) ☐ Surface Water (within 15 mile distance limit)
☐ No Water Withdrawals Within Target Distance Limits ☐ Other (fill in) _____

23. Total Population Served by Local Drinking Water Supply Source(s) (fill in or check unknown or not applicable):

76,000 or ☐ Unknown ☐ Not Applicable

24. Drinking Water Supply System Type for Local Drinking Water Supply Source(s) (check all that apply):

- ☐ Municipal (services over 25 people) ☐ Private
☐ Unknown ☐ Not Applicable

25. Distance to Nearest Drinking Water Well Within 4 Miles (fill in distance and check units or not applicable):

- ☐ Onsite Well ☐ Feet ☐ Miles ☐ Unknown ☐ Not Applicable
☐ Offsite Well: _____

26. Depth to Uppermost Used Aquifer from Lowest Documented Point of Contamination (fill in or check 1):

- ≈ 10 (feet) ☐ Waste Directly Deposited Below the Water Level of Uppermost Used Aquifer ☐ Unknown

27. Local Uses of Surface Water (check all that apply; check unknown only if no information available):

- ☐ Recreation ☐ Industrial Process/Cooling ☐ Unknown
☐ Commercial Fishery ☐ None ☐ Other (fill in) _____

28. Surface Water Adjacent to/Draining Site (check all that apply; include all surface water bodies on the drainage pathway):

- ☐ Stream ☐ River ☐ Lake ☐ Pond ☐ Unknown
☐ Wetland ☐ Bay ☐ Ocean ☐ None ☐ Other (fill in) _____

29. Distance to Nearest Downstream Intake Within 15 Miles (for each category, fill in distance and check units, or check unknown, not applicable or none):

Distance to Drinking Water Intake: ☐ Feet ☒ Miles ☐ Unknown ☐ None ☐ Not Applicable
11.2 (no surface water)

Distance to Intake for Other Use: ☐ Feet ☐ Miles ☒ Unknown ☐ None ☐ Not Applicable
_____ (no surface water)

Environmental Information

30. Is there a Sensitive Environment (as defined by the Sensitive Environments Rating Values Table of the rHRS) Within the Site's Target Distance Limit (4 mile radius for the air pathway, 15 stream miles for the surface water pathway):

- ☒ Yes ☐ No ☐ Unknown

NPL Characteristics Data Collection Form

Site Name: Ford Road Landfill
CERCLIS Number: OH0 980 510 002
Page 6 of 7

Scoring Information

31. Documented Observed Release (check all that apply):

☒ Ground Water ☒ Surface Water ☐ Air ☐ Soil Exposure ☐ None

32. Site Scoring Information (check if pathway evaluated and record the score):

☐ Ground Water Not Evaluated ☐ Surface Water 100.00
☐ Air Not Evaluated ☐ Soil Exposure Not Evaluated
☐ Overall Site Score 50.03

Site Assessment Information

33. PA Information:

a. Date of Most Recent PA Investigation Report (fill in or check 1):

3/1/87 ☐ Unknown ☐ Not Performed

b. Who Performed the PA? (check 1):

☐ FIT ☐ State ☒ Unknown ☐ Other _____ ☐ Not Applicable

c. Was a Reconnaissance Performed as Part of the PA? (check 1; if yes record the type of reconnaissance (e.g., onsite or offsite)):

☐ Yes _____ ☐ No ☒ Unknown ☐ Not Applicable

34. SI Information:

a. Date of Most Recent SI Investigation Report (fill in or check 1):

_____ ☐ Unknown ☒ Not Performed

b. Who Performed the SI? (check 1):

☐ FIT ☐ State ☐ Unknown ☐ Other _____ ☒ Not Applicable

c. Total Number of Samples Collected during the SI (fill in or check 1):

_____ samples ☐ Unknown ☒ Not Applicable

d. Number of Samples of Each Media Collected at the SI (check the media sampled and record the number of samples if known):

☐ Ground Water _____ samples ☐ Soil _____ samples ☒ Not Applicable
☐ Surface Water _____ samples ☐ Air _____ samples
☐ Sediment _____ samples ☐ Unknown

35. ESI Information:

a. Date of ESI Investigation Report (fill in or check 1):

10/12/93 ☐ Unknown ☐ Not Performed

b. Who Performed the ESI? (check 1):

☐ FIT ☐ State ☐ Unknown ☒ Other PRC-EMI ☐ Not Applicable

NPL Characteristics Data Collection Form

Site Name: Ford Road Landfill
CERCLIS Number: OHD 980 510 002
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Site Assessment Information (cont.)

c. Total Number of Samples Collected during the LSI (fill in or check 1):

19 samples ☐ Unknown ☐ Not Applicable

d. Number of Samples of Each Media Collected at the LSI (check the media sampled and record the number of samples if known):

<input checked="" type="checkbox"/> Ground Water <u>6</u> samples	<input type="checkbox"/> Soil <u>2</u> samples	<input type="checkbox"/> Not Applicable
<input checked="" type="checkbox"/> Surface Water <u>5</u> samples	<input type="checkbox"/> Air _____ samples	
<input checked="" type="checkbox"/> Sediment <u>6</u> samples	<input type="checkbox"/> Unknown	

36. If Additional Sampling Information from an Outside Party Was Used in the HRS Documentation Record, Indicate the Party Responsible for the Information (check all that apply):

<input type="checkbox"/> Potentially Responsible Party for the Site	<input type="checkbox"/> Other Federal Agency
<input type="checkbox"/> State Agency	<input checked="" type="checkbox"/> None
<input type="checkbox"/> EPA (other than Site Assessment Branch Activities)	<input type="checkbox"/> Other (fill in) _____

APPENDIX C
4-MILE RADIUS MAP

(One page)

SDMS US EPA REGION V

FORMAT- OVERSIZED - 5

IMAGERY INSERT FORM

The item(s) listed below are not available in SDMS. In order to view original document or document pages, contact the Superfund Records Center.

SITE NAME	FORD ROAD INDUSTRIAL LANDFILL		
DOC ID #	148517		
DESCRIPTION OF ITEM(S)	LARGE MAP OF ELYRIA OHIO		
REASON WHY UNSCANNABLE	<u> X </u> OVERSIZED	OR	<u> </u> FORMAT
DATE OF ITEM(S)			
NO. OF ITEMS	1		
PHASE	SAS		
PRP			
PHASE (AR DOCUMENTS ONLY)	<u> </u> Remedial <u> </u> Removal <u> </u> Deletion Docket <u> </u> AR <u> </u> Original <u> </u> Update # <u> </u> Volume <u> </u> of <u> </u>		
O.U.			
LOCATION	Box # <u> 1 </u> Folder # <u> 2 </u> Subsection <u> </u>		
COMMENT(S)			

APPENDIX D
SUMMARY OF LABORATORY RESULTS
(Seven pages)

TABLE D-1
SUMMARY OF MONITORING WELL SAMPLE ANALYSES

FORD ROAD LANDFILL

Sampling Location		MW-01	MW-02	MW-03	MW-3D	MW-B01	MW-TB-01
Date		05/18/93	05/18/93	05/18/93	05/18/93	05/18/93	05/18/93
Time		1745	1915	1517	1517	1615	1615
Organic Traffic Report No.		93ZF53S11	93ZF53S12	93ZF53S13	93ZF53D13	93ZF53R03	93ZF53R04
Inorganic Traffic Report No.		93ZF53S11	93ZF53S12	93ZF53S13	93ZF53D13	93ZF53R03	93ZF53R04
Sample Type		Environmental Groundwater	Environmental Groundwater	Environmental Groundwater	Field Duplicate	Field Blank	Trip Blank
VOLATILE ORGANIC COMPOUNDS	CRQL						
methylene chloride	10	3	2U	2	2U	3	2 J?
acetone	10	23	10 U	12 BU	2U	190 B	64 BU
1,1-dichloroethane	10	21	2U	2U	2U	2U	2U
cis-1,2-dichloroethene	10	2U	1 J?	2U	2U	2U	2U
1,1,1-trichloroethane	10	4 J?	2U	2U	2U	2U	2U
benzene	10	1 J?	2U	2U	2U	2U	2U
Tentatively Identified Compounds (Total)	N/A	5 J?	16 J?	ND	ND	ND	ND
SEMIVOLATILE ORGANIC COMPOUNDS	CRQL						
di-n-butylphthalate	10	2 U	2 U	2	2 U	2 U	--
bis-(2-ethylhexyl)phthalate	10	5 BU	17 BJH	5 BU	5 BU	1 JBU	--
Tentatively Identified Compounds (Total)	N/A	12 J?	ND	16 J?	ND	5 J?	--
PESTICIDE/PCB COMPOUNDS	CRQL						
No pesticide/PCB compounds detected							
ANALYTE DETECTED	CRDL						
antimony	60	6	5	2U	5	10	--
arsenic	10	10	24	3	2	2U	--
barium	200	52.9	112	28.7	28.3	7.0 U	--
cadmium	5	0.2U	0.6	0.2U	0.2	0.2U	--
calcium	5,000	163,000	117,000	83,500	83,300	610 U	--
cobalt	50	44.2	7.0 U	7.0 U	7.0 U	7.0 U	--
iron	100	23,600	3,840	1,710	1,760	98.0 U	--
magnesium	5,000	65,200	182,000	57,900	57,500	122 U	--
manganese	15	4,550	1,720	639	634	6.0 U	--
nickel	40	85.9	60.9	24.0 U	24.0 U	24.0 U	--
potassium	5,000	6,100 U	155,000	19,900	19,700	6,100 U	--
selenium	5	3	10U	2U	2U	2U	--
sodium	5,000	169,000	511,000	47,500	47,300	1,200 U	--

TABLE D-1 (continued)
SUMMARY OF MONITORING WELL SAMPLE ANALYSES

FORD ROAD LANDFILL

Notes:

All concentrations are in micrograms per liter ($\mu\text{g/L}$) unless otherwise noted.

CRQL = Contract-required quantitation limit

CRDL = Contract-required detection limit

ND = Not detected

N/A = Not applicable

-- = Not analyzed

GENERAL QUALIFIERS	DEFINITION
U	The compound or analyte was analyzed for but not detected. Associated value is the sample quantitation limit (SQL).
H	Analytical bias is high.
?	Analytical bias is unknown.
COMPOUND QUALIFIERS	DEFINITION
B	Compound was detected in an associated laboratory blank.

TABLE D-2
SUMMARY OF SURFACE WATER SAMPLE ANALYSES

FORD ROAD LANDFILL

Sampling Location		SW-05	SW-02	SW-2D	SW-B01	SW-TB
Date		05/18/93	05/18/93	05/18/93	05/18/93	05/18/93
Time		1700	1320	1320	0800	0800
Organic Traffic Report No.		93ZF53S03	93ZF53S02	93ZF53D02	93ZF53R01	93ZF53R02
Inorganic Traffic Report No.		93ZF53S03	93ZF53S02	93ZF53D02	93ZF53R01	93ZF53R02
Sample Type		Background Black River	Environmental Black River	Field Duplicate	Field Rinsate Blank	Trip Blank
<i>VOLATILE ORGANIC COMPOUNDS</i>	CRQL					
methylene chloride	10	2	2U	2U	2	1 J?
acetone	10	10 U	9 BUJ?	23 J?	65 BU	140 B
<i>Tentatively Identified Compounds (Total)</i>	N/A	ND	ND	ND	ND	ND
<i>SEMIVOLATILE ORGANIC COMPOUNDS</i>	CRQL					
bis - (2 - ethylhexyl) phthalate	10	2 BU	6 BU	9 BU	5 BU	--
<i>Tentatively Identified Compounds (Total)</i>	N/A	ND	ND	ND	ND	--
<i>PESTICIDE/PCB COMPOUNDS</i>	CRQL					
No Pesticide/PCB compounds detected.						
<i>ANALYTE DETECTED</i>	CRDL					
aluminum	200	172	112	98.0 U	98.0 U	--
barium	200	41.5	41.6	41.4	7.0 U	--
cadmium	5	0.5	0.4	0.5	0.2U	--
calcium	5,000	72,500	71,300	72,600	610 U	--
iron	100	424	344	356	98.0 U	--
lead	3	3	2U	2	2U	--
magnesium	5,000	22,400	22,400	22,600	122 U	--
manganese	15	124	105	107	6.0 U	--
sodium	5,000	35,700	38,100	38,200	1,200 U	--

TABLE D-2 (continued)
SUMMARY OF SURFACE WATER SAMPLE ANALYSES

FORD ROAD LANDFILL

Notes:

All concentrations are in micrograms per liter ($\mu\text{g/L}$) unless otherwise noted.

CRQL = Contract-required quantitation limit

CRDL = Contract-required detection limit

ND = Not detected

N/A = Not applicable

-- = Not analyzed

GENERAL QUALIFIERS	DEFINITION
J	Value is estimated (also indicates a compound that is detected below the CRQL).
?	Analytical bias is unknown.
U	The compound or analyte was analyzed for but not detected. Associated value is the sample quantitation limit (SQL).
COMPOUND QUALIFIERS	DEFINITION
B	Compound was detected in an associated laboratory blank.

**TABLE D-3
SUMMARY OF SOIL AND SEDIMENT SAMPLE ANALYSES**

FORD ROAD LANDFILL

Sampling Location		SD-07	SD-01	SD-05	SD-02	SD-03	SD-04	SD-06	SD-08
Date		05/18/93	05/18/93	05/18/93	05/18/93	05/18/93	05/18/93	05/18/93	05/18/93
Time		2005	1425	1715	1330	1560	1640	1500	1400
Organic Traffic Report No.		EWG91	EWG85	EWG89	EWG86	EWG87	EWG88	EWG90	EWG92
Inorganic Traffic Report No.		METW91	METW85	METW89	METW86	METW87	METW88	METW90	METW92
Sample Type		Background Int. Stream	Environmental Int. Stream	Background Black River	Environmental Black River	Environmental Black River	Environmental Black River	Environmental Wetland	Environmental Black River
Appearance		Med. Brown	Orange	Med. Brown	Med. Brown	Med. Brown	Med. Brown	Dk. Brown	Orange
VOLATILE ORGANIC COMPOUNDS	CRQL								
acetone	10	11 U	16 JBU	44 B	14 U	12 JBU	17 U	17 U	20 JBU
2-butanone	10	11 U	16 U	12 J?	14 U	15 U	17 U	17 U	20 U
toluene	10	1 J?	16 U	18 U	14 U	15 U	17 U	17 U	20 U
<i>Tentatively Identified Compounds (Total)</i>	N/A	ND	ND	ND	ND	ND	ND	ND	ND
SEMIVOLATILE ORGANIC COMPOUNDS	CRQL								
naphthalene	330	380 U	520 U	560 U	100 J?	40 J?	28 J?	140 J?	41 J?
2-methylnaphthalene	330	380 U	520 U	42 J?	250 J?	41 J?	40 J?	61 J?	40 J?
acenaphthylene	330	380 U	520 U	560 U	420 U	500 U	560 U	600 U	27 J?
acenaphthene	330	380 U	520 U	560 U	420 U	500 U	27 J?	100 J?	37 J?
dibenzofuran	330	380 U	520 U	560 U	420 U	500 U	560 U	78 J?	28 J?
fluorene	330	380 U	520 U	560 U	420 U	25 J?	30 J?	110 J?	45 J?
phenanthrene	330	380 U	110 J?	150 J?	200 J?	310 J?	310 J?	1,000	600
anthracene	330	380 U	26 J?	41 J?	29 J?	85 J?	76 J?	200 J?	140 J?
carbazole	330	380 U	520 U	560 U	420 U	42 J?	560 U	160 J?	72 J?
di-n-butylphthalate	330	380 U	520 U	53 J?	420 U	500 U	40 J?	600 U	560 U
fluoranthene	330	380 U	400 J?	270 J?	270 J?	740	490 J?	1,200	1,200
pyrene	330	380 U	360 J?	210 J?	280 J?	910 J?	340 J?	920 J?	920 J?
butylbenzylphthalate	330	380 U	520 U	560 U	420 U	500 U	560 U	600 U	39 J?
benzo(a)anthracene	330	380 U	180 J?	120 J?	130 J?	550	220 J?	530 J?	420 J?
chrysene	330	380 U	220 J?	160 J?	200 J?	720	260 J?	610	570
bis-(2-ethylhexyl)phthalate	330	380 U	140 J?	560 U	160 J?	500 U	560 U	340 J?	240 J?
benzo(b)fluoranthene	330	380 U	180 J?	120 J?	170 J?	870	220 J?	440 J?	490 J?
benzo(k)fluoranthene	330	380 U	200 J?	120 J?	210 J?	770	220 J?	430 J?	500 J?
benzo(a)pyrene	330	380 U	170 J?	120 J?	150 J?	640	240 J?	530 J?	500 J?
indeno(1,2,3-cd)pyrene	330	380 U	120 J?	91 J?	61 J?	470 J?	180 J?	380 J?	390 J?
dibenzo(a,h)anthracene	330	380 U	520 U	560 U	420 U	500 U	560 U	100 J?	560 U
benzo(g,h,i)perylene	330	380 U	76 J?	66 J?	84 J?	240 J?	120 J?	170 J?	200 J?
<i>Tentatively Identified Compounds (Total)</i>	N/A	2,150 J?	12,720 J?	13,500 J?	20,100 J?	13,700 J?	8,760 J?	14,760 J?	14,800 J?

TABLE D-3 (continued)
SUMMARY OF SOIL AND SEDIMENT SAMPLE ANALYSES

FORD ROAD LANDFILL

Sampling Location		SD-07	SD-01	SD-05	SD-02	SD-03	SD-04	SD-06	SD-08
Sample Type		Background Int. Stream	Environmental Int. Stream	Background Black River	Environmental Black River	Environmental Black River	Environmental Black River	Environmental Wetland	Environmental Black River
Appearance		Med. Brown	Orange	Med. Brown	Med. Brown	Med. Brown	Med. Brown	Dk. Brown	Orange
PESTICIDES/PCB COMPOUNDS		CRQL							
delta-BHC	1.7	2.0 U	2.7 U	2.9 U	1.2 JPX?	1.4 JPX?	2.9 U	6.1 U	110 PJ?
endosulfan I	1.7	2.0 U	4.5 ZXJ?	2.9 U	3.3 ZJ?	4.6 ZXJ?	5.0 ZJ?	6.1 U	29 U
dieldrin	3.3	3.8 U	5.2 U	5.6 U	4.2 U	5.0 U	5.6 U	6.3 JPX?	56 U
4,4'-DDE	3.3	3.8 U	5.2 U	5.6 U	4.2 U	5.0 U	5.6 U	17 PXJ?	56 U
endrin	3.3	3.8 U	5.2 U	5.6 U	4.2 U	5.0 U	5.6 U	32 PZJ?	56 U
4,4'-DDD	3.3	3.8 U	2.9 JPXZ?	5.6 U	4.2 U	5.0 U	5.6 U	12 U	56 U
endosulfan sulfate	3.3	3.8 U	5.2 U	5.6 U	4.2 U	4.3 PJ?	5.6 U	12 U	56 U
4,4'-DDT	3.3	3.8 U	5.8 PXJH	5.6 U	2.0 PJH	3.2 XJH	5.6 U	12 U	56 U
endrin aldehyde	3.3	3.8 U	5.2 U	5.6 U	4.2 U	5.0 U	5.6 U	12 PXJ?	56 U
alpha-chlordane	1.7	2.0 U	2.7 U	2.9 U	2.1 U	2.6 U	2.9 U	5.4 JPX?	100 PJ?
gamma-chlordane	1.7	2.0 U	2.7 U	2.9 U	2.1 U	2.6 U	2.9 U	6.1 JPX?	29 U
Aroclor-1242	33.0	38 U	45 J?	56 U	26 PJ?	50 U	56 U	120 U	560 U
Aroclor-1254	33.0	38 U	50 J?	56 U	38 PJ?	50 U	56 U	1,100	560 U
Aroclor-1260	33.0	38 U	52 U	56 U	42 U	41 J?	56 U	120 U	560 U
ANALYTE DETECTED (mg/kg)		CRDL							
aluminum	40	16,400	8,350	11,800	5,880	6,690	10,300	11,300	8,120
antimony	12	4.1 UNJL	5.4 UNJL	5.6 UNJL	4.3 UNJL	18.8 NJL	19.8 NJL	6.6 UNJL	6.5 UNJL
arsenic	2	7.5	10.0	8.5	9.1	45.4	6.9	8.8	6.8
barium	40	58.9	91.4	96.3	39.6 B	159	88.8	701	64.7 B
beryllium	1	0.65 B	0.72 B	0.69 B	0.58 B	0.54 B	0.67 B	0.59 B	0.64 B
cadmium	1	0.31 U	2.5	57.5	3.0	32.6	10.8	2.1	4.6
calcium	1,000	1,520	14,800	2,220	3,530	2,570	2,500	66,800	8,610
chromium	2	21.5 NJL	207 NJL	96.4 NJL	56.3 NJL	57.4 NJL	134 NJL	137 NJL	197 NJL
cobalt	10	6.9 B	15.4	10.9 B	11.6	10.4 B	9.1 B	10.4 B	8.1 B
copper	5	25.0 *J+	148 *J?	43.2 *J?	58.0 *J?	75.2 *J?	81.7 *J?	72.4 *J?	137 *J?
iron	20	31,900	25,600	29,000	18,100	37,900	25,400	31,700	23,400
lead	0.6	14.8 *	62.6 *	58.2 *	27.2 *	52.9 *	78.5 *	298 S*	54.4 S*
magnesium	1,000	3,440	4,710	3,750	2,310	2,360	3,130	6,920	4,170
manganese	3	195	1,430	153	193	134	126	862	217
mercury	0.1	0.06 U	0.10 B	0.34	0.09 B	0.14	0.69	0.15 B	0.17
nickel	8	21.7	135	40.7	61.1	28.1	44.3	111	112
potassium	1,000	1,240	1,470	1,640	1,500	987 B	1,370 B	2,150	1,430 B
selenium	1	0.63 UNJL	0.87 UN	0.91 UN	2.2 NJL	2.8 NJL	4.9 NJL	1.2 BWNJL	1.0 BN
silver	2	2.7	2.4 B	3.5	1.9 B	3.6	3.1 B	2.4 B	2.0 B
sodium	1,000	92.3 NJ+	478 B	154 BNJ+	149 B	161 BJ+	204 B	976 B	325 B
thallium	2	0.29 B	0.60 B	0.84 B	0.76 B	0.41 B	0.49 B	0.43 U	0.40 U
vanadium	10	29.8	18.9	26.2	31.7	18.1	26.6	23.0	22.8
zinc	4	61.4	196	293	141	290	295	1,120	251
cyanide	10	0.57 U*	0.92 *	0.79 U*	0.57 U*	0.74 U*	0.86 U*	0.96 U*	0.87 U*

TABLE D-3 (continued)
SUMMARY OF SOIL AND SEDIMENT SAMPLE ANALYSES

FORD ROAD LANDFILL

Notes:

All concentrations are in micrograms per kilogram ($\mu\text{g/kg}$) unless otherwise noted.

CRQL = Contract-required quantitation limit

CRDL = Contract-required detection limit

ND = Not detected

N/A = Not applicable

-- = Not analyzed

GENERAL QUALIFIERS	DEFINITION
J	Value is estimated (also indicates a compound that is detected below the CRQL).
H	Analytical bias is high.
L	Analytical bias is low.
?	Analytical bias is unknown.
U	The compound or analyte was analyzed for but not detected. Associated value is the sample quantitation limit (SQL).
COMPOUND QUALIFIERS	DEFINITION
P	Variance between GC columns was greater than 25 percent in pesticide or Aroclor (PCB) analyses. The lower value is reported.
B	Compound was detected in an associated laboratory blank.
X	Reported compound coelutes with PCB Aroclor peaks on one or both analytical columns.
Z	Confirmation of this compound is questionable.
ANALYTE QUALIFIERS	DEFINITION
B	Value is below the CRDL.
N	Matrix spike percent recovery values were outside of control limits.
W	Furnace AA post-digestion spike recovery values were outside of control limits.
*	Duplicate relative percent difference values were outside of control limits.
S	Analyte concentration was determined by Method of Standard Additions (MSA).
+	Correlation coefficient for MSA was less than 0.995.